# The Journal of the American Medical Association

**Published Under the Auspices of the Board of Trustees**

VOL. LVIII, No. 25 CHICAGO, ILLINOIS JUNE 22, 1912


## THE SHORTCOMINGS OF DERMATOLOGY *


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It is my great privilege to welcome you here to-day at our annual convention in the interests of our common special branch of medicine. I assure you that I am deeply grateful to you all for the honor you conferred on me two years ago in choosing me to preside over these present sessions and it is my sincerest wish that I may discharge acceptably the duties of my honorable position.

The subject of my address is the shortcomings of dermatology — perhaps not a very flattering theme to choose for this occasion, but one which impresses me more and more the older I grow and the more intimately I become involved in dermatologic practice and teaching.

For the purpose of this thesis special scientific knowledge may be divided into several departments: diagnosis, clinical and pathologic, etiology and treatment.

### CLINICAL DIAGNOSIS

There is no doubt that we dermatologists are very proficient in clinical diagnosis—so much so, in fact, that our detractors are wont to accuse us of overelaboration in our nosology. It is, of course, very true that we have a great advantage over the internists in having our pathologic fields under our very noses, so to speak. We can employ all our senses, including our eyes—our best-trained organs of sense — while diagnosticians in many other branches of medicine must often work in the dark and grope their way about, guided only by their sense of touch, of sound or of smell. This unfortunate deficiency is partly counteracted by the clever employment of numerous instruments of precision, it is true, but still their special provinces lie hidden away under the skin or in dark and unapproachable cavities of the body.

It is greatly to our credit that this great diagnostic advantage of sight has not been thrown away by our predecessors or by ourselves and to-day it is not too great a boast for us to say that the best of us can practically always tell the patient the exact name of the disease with which he is afflicted. In other words, our possibilities of clinical diagnosis are perhaps greater and more accurate than those of any other branch of medicine. When there are more than 190 distinct titles of disease in the official list of the American Dermatological Association, one may appreciate how skilful in clinical diagnosis dermatologists have become.

On the other hand, however, is it not perhaps true that in this wealth of titles we have been somewhat overzealous in our minute subdivisions? Let us take merely, as an example, two classes of cases, i. e., the tuberculids and benign cystic epithelioma. In the group of tuberculids we have three titles which, from a pathologic point of view, at least, are really synonymous. I refer to "acnitis," "folliclis" and "hidradenitis destruens suppurativa," and there are even other synonyms. We all acknowledge their tuberculous etiologic kinship, their usually tuberculous histologic structure, their frequent caseation and their constant macroscopic jagged cicatricial termination. Why, then, have men given separate names clinically to these conditions? Apparently, only from their anatomic seat. When these practically similar lesions occur on the face we call the affection "acnitis"; when they are found on the extremities we refer to them as "folliclis"; and when they have their seat in the sweat-glands we designate them "hidradenitis destruens suppurativa." Is such a redundant nomenclature, so puzzling and even discouraging to our non-dermatologic confrères and to our students, necessary or desirable?

Again, in the case of benign cystic epithelioma, consider what a superfluity of titles there are. To mention only a few, we have "epithelioma" or "acanthoma adenoides cysticum" (Brooke and Unna), "trichoepithelioma papillosum multiplex" (Jarisch), "hydradenomes éruptifs" (Jacquet and Darier), "syringocystadenoma" (Török) and lastly "syringocystoma." Now what does this plethora of appellations signify? All men admit the epitheliomatous character of these tumors, both clinically and histologically, and also their gland-like structure microscopically, but the division of opinion and hence of nomenclature depends merely on the seat of origin of these otherwise similar new growths. If their origin is indefinite or from the rete malpighii, they are called "epitheliomas"; if they arise from the hair follicles they are dubbed "tricho-epitheliomas"; and if they are offshoots from the sweat system they are termed "syringocystomas" or "syringocystadenomas."

These two classes of cases are merely illustrative examples of our nomenclative redundancy — we could all mention many more. Is there no remedy for this overelaboration which arises, I think, from the absence of any acknowledged supreme authority?

The idea has occurred to me (it may not be an original one) that there could be an international tribunal by whose decisions all countries would promise to abide. This supreme court could be composed of representatives chosen by the different national dermatologic associations, each body electing perhaps two members noted for their wide clinical, pathologic, chemical and serologic knowledge and experience, men who would be able and willing to attend the meetings of this tribunal, which

* Chairman's address before the Section on Dermatology of the American Medical Association, at the Sixty-Third Annual Session, at Atlantic City, June, 1912.

could be held at times sufficiently in advance of the international dermatologic congresses to allow ample deliberation and the preparation of a report of their findings and recommendations which would then be submitted for final action to the will of the supervening congress.

A second ameliorating measure would be the drawing-up of a common table of measurements of skin lesions based on scientific data, thus relegating to eternal oblivion our present code of similes and comparisons with national coins, with national measurements and with seeds, fruits, vegetables, et cetera.

A third would be the election of a subcommittee, perhaps composed of a few European representatives, men living within comparatively easy distances, to whom all new dermatologic productions could be forwarded as soon as completed. These literary contributions should be accompanied by large colored (?) photographs, moulages, microscopic sections, culture tubes, etc., and this subcommittee, meeting at frequent and stated intervals, would be then in an authoritative position (1) to determine priority of scientific achievement; (2) to correlate and identify rare and similar dermatoses to which widely scattered investigators had given widely variant titles; (3) to publish an international journal containing the cream of these world-wide contributions, printed in one and only one of three languages (i. e., English, French or German), the less important papers being returned to the author to appear as now in one of his own national journals. To each of these "crowned" papers could be added the judgment and criticism of this important committee, thus enhancing its value just as Besnier and Doyon's translation of Kaposi's "Skin Diseases" immeasurably enhanced the value of the original book; and (4) to edit a dermatologic index medicus at frequent intervals containing references to all papers which had passed through its hands and been published in its own journal or in some other.

### PATHOLOGIC DIAGNOSIS

In speaking thus far of our clinical diagnostic acumen I have really claimed that our only fault was overelaboration; and now, in coming to our knowledge of pathologic diagnosis, have we just cause for equal self-congratulation? I am afraid not. It is true, to be sure, that when we know the clinical diagnosis we have a fairly accurate and distinct idea in our minds of the histologic picture of practically all our known dermatoses. But, on the other hand, when we are at a loss clinically to differentiate between two or more diseases can we always be sure that with the aid of the microscopic sections we can definitely settle the dispute? I fear not.

Even in such every-day affections as syphilis and tuberculosis we, as pathologists, make frequent mistakes. It has been my good fortune this winter to restore to health, by means of antisyphilitic treatment, a broken-down young woman who had been subjected to two operations, eight months of frequent injections of tuberculin, and overdoses of *x*-rays on account of an ulcer on the right arm, diagnosticated microscopically as tuberculosis. You could all, no doubt, recite similar experiences.

Or again, when we have not seen the patient or have not been told of the probable clinical symptoms, how many of us, although fairly well versed in histopathology, can be sure of our diagnosis microscopically in a good percentage of our dermatoses?

I was much impressed this last winter by a striking illustration of this very point. We at the Massachusetts General Hospital have been much perplexed by a localized nodular process on a man's buttock — a process which we have watched and treated and puzzled over for years. The patient was shown to the American Dermatological Association last spring, and opinions, when hazarded at all, favored tuberculosis or carcinoma. As an enigma, I sent a section of one of these nodules to one of our most zealous western confrères, who had not seen the patient, and who was naturally somewhat at a loss to make a diagnosis from the microscopic findings and therefore forwarded the specimen to his former European master, a most celebrated and expert histologist. In due time the answer came back: "mycosis fungoides." Perhaps this most positive pronouncement is correct, but, if it is, we Bostonians must enlarge very materially our conceptions of this disease.

And lastly, in the great class of dermatologic inflammation, what can we say of our powers of differentiating histopathologically many of these diseases?

We recognize pretty clearly erythema induratum (if we really feel that this affection belongs rightly in this class), urticaria pigmentosa, dermatitis exfoliativa in a severe or old example, lichen planus, psoriasis perhaps, furunculosis, equinia, pustula maligna, erysipelas, dermatitis gangrenosa, dermatitis from *x*-rays, varicella and variola. But what a pitiably small list this is when we come to add up the total—thirteen diseases out of fifty-seven!

Of course, when we have seen the patient we are always in a position to say that the histologic picture conforms with the clinical diagnosis of any of this large group of diseases, because we know the histology of each of them; but my point is that, save for the few exceptions I have mentioned, the remaining great majority of our inflammations have no specific histologic differences, thus far recognized by our experts, which allow us to say positively: "This is eczema, this is urticaria, this is pityriasis rosea, this is herpes simplex, this is dermatitis herpetiformis, etc."

### ETIOLOGY

Thus far my critics may say, perhaps, that I have been overcaptious, fault-finding, striving at trivialities; but now that we are to deal with the cause, and later with the treatment, of disease, I believe that not even the most optimistic can cavil at my remarks.

Since the discovery of bacteria, fungi and protozoa, dermatologists, like all their medical brothers, have made enormous advances in knowledge of disease—a just cause for self-congratulation; but thus far, unhappily, the list of cutaneous diseases to which men have ascribed and proved an infectious origin is relatively small numerically; according to the 1908 returns of the American Dermatological Association, a little over 21 per cent. of our recognized titles falls within this parasitic group. When, however, we compute percentages from the point of view of the number of individuals treated for these same infectious skin diseases, we find, fortunately, that nearly 54 per cent. of these patients came within this etiologically recognized zone — not nearly so bad a showing.

Now, excepting this infectious group, let us see where we stand etiologically in regard to the remainder of our skin diseases. For this purpose allow me to base my remarks on an analysis of my own patients. Let me consider my last 768 new patients, drawn from almost every social stratum and from many different states of

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this country. From an actual count of the diagnoses of these people (disregarding the infectious diseases), I find fifteen dermatoses recorded ten times or more and totaling 547 individuals—about 71 per cent. of the whole. I have chosen the common diseases for this study in order to make this a practical question. Now let me record in parallel columns these fifteen diseases and the number of patients afflicted by them. In the first column I shall place those affections whose etiology is practically accepted by all and in the second those whose cause is unknown or much disputed.

COMPARISON OF DISEASES WITH KNOWN AND UNKNOWN ETIOLOGY

| 1. Affections with Known Etiology | No. of Cases | 2. Affections with Unknown Etiology | No. of Cases |
|---|---|---|---|
| Acne vulgaris | 81 | Eczema | 122 |
| Dermatitis venenata | 41 | Alopecia furfuracea | 114 |
| Keratosis senilis | 18 | Alopecia areata | 25 |
| Urticaria | 17 | Seborrhea | 25 |
| | 157 | Rosacea | 21 |
| | | Eczema seborrheicum | 17 |
| | | Hypertrichosis | 17 |
| | | Psoriasis | 17 |
| | | Hyperidrosis | 11 |
| | | Pruritus | 11 |
| | | Pityriasis rosea | 10 |
| | | | 390 |

In other words, we are brought face to face with the discouraging fact that we specialists know the cause of the common non-infectious diseases affecting our patients in only about 40 per cent.; and when we are constantly asked the question by intelligent patients: "Doctor, why have I got this disease?" we must feel chagrined when we must so often answer: "I don't know."

But even in this meager 40 per cent. of etiologic knowledge we cannot conscientiously feel, I think, that we know the whole truth.

For example, let us consider acne vulgaris. We all recognize the brilliant work in this field of our confrères, Gilchrist and Engman, among many others. To them the acne bacillus means perhaps everything, but to some of us this presumptive causative agent does not seem to be sufficient to explain all cases of the disease, for certainly this bacterium cannot be found in all examples, and on the other hand, the rôle of the staphylococcus cannot be ignored from a clinical, a cultural or a vaccinal standpoint.

And, again, what can we say of dermatitis venenata? We assert that the cause of this inflammation is the reaction of the skin to some well-recognized cutaneous irritant. Granted, but why should some men be able to handle *Rhus venenata* or *Primula obconica* with impunity, while many others are poisoned by these plants? Even more incomprehensible is the fact that certain individuals have been immune to these vegetable poisons for many years and then suddenly develop a susceptibility of perhaps intense degree. And, as another example, why should certain individual masons, painters, scrubwomen, physicians, and the representatives of many other trades and professions be obliged to discontinue their work because of susceptibility to the irritating materials of their respective occupations, while the great majority of their fellow-workers remain impassive to such exposures? To this latter question we may answer "immunity," but for the present, at least, this reply simply begs the question.

In the case of keratosis senilis, we believe that the chemical action of the sun acts deleteriously on the human skin as it grows older and we recognize the fact that certain occupations, such as farming and sea-faring, are especially conducive to this cutaneous change; but if this theory is to explain the whole question, why do we find this anomaly in ladies who are shut up in their houses most of the time, and again, why do we encounter this condition in comparatively young people?

And lastly, what can we say of urticaria? We are all in accord, I think, in condemning some toxic proteid as the cause of this disease. But here again most people are immune to these indicted causes and others are susceptible only once in a while. Then, the vast majority of sufferers recover quickly from this internal poisoning when the cause has been removed; but on the other hand, others do not regain their former equilibrium and the disease continues, either in recurrent attacks or ceaselessly for weeks or months or even years. And, finally, we all are still at loggerheads as to the exact nature of this form of poisoning. Is it an angioneurosis or is it an inflammation?

Thus we see that even in the meager column containing the four common, non-infectious diseases, of which we flatter ourselves that we know the cause, we can easily find large flaws in our knowledge.

When we turn to Column 2, containing as it does our very commonest skin affections, what must we confess of our etiologic knowledge? The answer is one to make us all feel depressed. We have suspicions and pet theories about them all, but there is not one of these eleven everyday, oft-recurring maladies to which we can point and say to ourselves, our patients, or our students without fear of contradiction, "this is due to this specific cause," "that owes its origin to that," et cetera.

## TREATMENT

In the final division of this introspective and critical study we come to the practical side of our profession, the side which determines our value to our patients from whom most of us derive our means of livelihood — the side which justifies our very existence as physicians.

Without undue pride I think we can make claim to the fact that our therapeutic success is quite as great as that of any of our medical brethren. Should this answer satisfy us, however? It should not. Unfortunately, we dermatologists suffer from three practical disabilities. First, skin diseases manifest themselves outwardly in such a way that our patients can be their own judges as to the daily progress or stationary condition of their maladies. Second, our patients are, as a rule, well enough to insist on living their customary lives and, withal, expect us to cure them when they have been told emphatically that such a course means a continuance of trauma or of intoxication. Third, it has always been our patients' creed that all skin diseases are, or should be, curable, and usually in a short space of time.

Contrast these, our ever-present difficulties, with the conditions which confront other medical men. A patient suffering from some internal disorder cannot examine every day the seat of his disease and compare it visually with its condition and extent yesterday or one week ago. A patient with a broken leg or with typhoid fever cannot leave his bed, but remains day in and day out under just the conditions which his physician dictates and which his nurse sees are fulfilled. A patient brought low by pneumonia, phthisis, or cancer does not expect that he can necessarily recover and does not therefore leave his attending doctor because he is not cured, or, what is worse, go about making malicious remarks about his skill. These are, as I say, handicaps under which we especially must labor.

Leaving to one side these peculiar therapeutic difficulties, these excuses, if you will, where do we stand as successful or unsuccessful practitioners of medicine? In the acute diseases we are reasonably fortunate in our skill. We can alleviate discomfort, and, in a reasonably short time, restore to health a majority of our patients suffering from many of the conditions which arise suddenly. But when the acute diseases have been maltreated by others or by ourselves, or, for some unknown reason, become chronic, then we very often fail in our endeavors. Personally, I feel chagrined at my frequent therapeutic failures. It so often happens to me, as it does to others, that patients are sent, or come from, long distances with the fixed idea that they are to be cured because they are consulting a specialist. They present themselves as old victims of acne vulgaris, eczema, psoriasis, alopecia furfuracea, alopecia areata, sycosis, lupus vulgaris, or what not; and how often in the end do we have to acknowledge our defeat? And yet these diseases are among our very commonest. It is not necessary here for me to mention prurigo, pityriasis rubra pilaris, hydroa vacciniforme, dermatitis herpetiformis among the inflammations; chloasma, acanthosis nigricans, palmar and plantar keratoses, verruca, ichthyosis, scleroderma and elephantiasis among the hypertrophies; practically all of the atrophies, and so on through the remainder of our dermatologic classification, in order to remind you of our therapeutic position to-day. We can all perhaps estimate our exact status in the people's mind when we see the floods of dermatologic advertisements in newspapers, street-cars, and on billboards disfiguring the landscape wherever we turn; when we hear of our best friends consulting osteopaths; when we read that there are 126 offices in the United States devoted to a certain form of treatment of the hair; and when we walk along the streets of our principal cities and note the glaring signs of the many commercial, self-styled "dermatologists.". These are unfortunate but undeniable truths and we owe it to ourselves to advance our knowledge and to increase our successes to such an extent that these quasi-medical influences shall no longer be necessary or tolerated.

This brings me to the conclusion of this unpleasant task. This perhaps severe criticism of ourselves and our specialty is not meant to be disagreeable or pessimistic. It is intended simply to be a sort of moral and intellectual house-cleaning, a plain statement of our deficiencies, brought to your notice at a rather unusual time, perhaps, but with a definite purpose.

We all know of the great sums of money which have been donated by philanthropic men of wealth for the study of various diseases which afflict the human race. There seems to me no better way for a man to spend his surplus income, but we too should make claim to our share of these valuable gifts for the investigation of skin diseases. It is true that cutaneous affections do not often kill, but they maim and they torture and they disfigure, and at times ruin the lives of many poor men and women. These conditions should be combated until they have been conquered. To accomplish this end we need financial resources, but we need also the help of some of the brilliant young men who are graduating from our medical schools every year, and here is where we who are teachers can play our part by impressing on our students the unappreciated importance of skin diseases, telling them the misery they often entail and laying before them the great fields of pathology and therapeutics which lie ready to be tilled by some future clever scholar.

This is a work which it is our duty to perform, one which has prompted me to try to play my humble share by pointing out to you disagreeable facts which you are all cognizant of but which are not perhaps dwelt on at such great length in such a public manner. We who are here to-day are mostly teachers and practitioners of our chosen profession. We are, most of us, dependent on our private patients for our daily bread, and what time we can spare from this necessary labor we give to our hospitals and to our medical schools, thus leaving but an insignificant fraction of our working hours to research. Science does not make progress nowadays by rapid strokes of luck but rather as a result of long, arduous hours spent in the laboratory with one object in view at a time. This has been the method by which we and our patients have profited by the wonderful discoveries of diphtheria antitoxin, antityphoid vaccination, meningitis antitoxin, salvarsan, the Wassermann reaction, etc. This unselfish method of small incomes and long working hours must be adopted by dermatology if we, its present masters, want to see our dreams fulfilled. We need and must have dermatologic research workers and we here must see that such men are produced. There is where our greatest mission lies to-day, and may we go forth from this meeting and do our share in producing them!

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## THE TREATMENT OF SYPHILITIC DISEASES OF THE NERVOUS SYSTEM BY SALVARSAN *

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1. There are diseases of the brain and spinal cord, their coverings, linings and blood-vessels that are caused solely by syphilis. These diseases are tabes, paresis certain forms of myelitis, myelomalacia, encephalomalacia, meningitis and endarteritis, and gummatous formation. Each of them, it matters not what is the seat or extent of the morbid process, causes symptoms which in their *ensemble* constitute well-defined clinical entities, and as such may be diagnosticated with readiness and certainty.

2. We possess tests and procedures (the Wassermann test and its modifications, chemical and histologic examination of the cerebrospinal fluid) whose application permits us to say positively that the individual who exhibits the clinical features of the above diseases has or has not syphilis or its hemic sequelæ.

3. Until the discovery of salvarsan we were not in possession of a cure for syphilis. Although mercury when administered in adequate doses does unquestionably either kill the *Spirochæta pallida* or aid the vital resistance to overcome the activity and to destroy them, in many instances it fails to do so. Furthermore, after the parasite of syphilis has occupied whatever part of the body which may be its host for a long time, it appears to gain an immunity from mercury.

No one denies either that mercury is a spirillicide, or that, given in adequate doses for a sufficient time, it overcomes the infection in many instances. But the fact

* From the Neurological Institute of New York.

* Because of lack of space, this article is abbreviated in THE JOURNAL by the omission of a tabulated report of cases. This table appears in the reprints, a copy of which will be sent by the author or by THE JOURNAL (during the year 1912 only) on receipt of a stamped addressed envelope.

that it is an inadequate, inefficient, impotent curative agency when given empirically is attested by the occurrence of syphilitic nervous diseases.

One of the experiences that impressed itself most deeply on us when we first began the study of syphilitic nervous diseases was that individuals who had had syphilis and who had been treated for it in the orthodox way and during the alleged necessary period of time developed nervous diseases that flow out of syphilis as early (that is, as soon after infection) and as severely as those who had little or no treatment.[1]

4. Whether or not we are now in possession of a cure for syphilis remains to be seen. In our judgment it is the neurologist who must give the dependable answer to this question. These are the facts: Syphilitic diseases of the nervous system occur; they may be diagnosticated positively before irrecoverable structural changes have taken place; untreated they are progressive to dissolution.

Before this question can be answered a vast amount of clinical material must be collected. The diagnosis in every instance must be confirmed by the tests at our command, and the patient must have remained a year at least within observation. It only adds to our confusion to learn that a score or a thousand patients have received an injection of salvarsan unless we are told also the state of health in which they are a year later, and whether or not their blood and cerebrospinal fluid give a negative or positive Wassermann reaction.

While we are making and collecting these statistics, on which the reputation of the remedy must stand or fall, we shall certainly learn what is the technic to employ in its administration, and we shall determine what constitutes its adequate administration which assuredly we do not know at the present time.

The object of this communcation is to discuss these questions and to record the results of eighteen months' experience during which time seventy-five patients suffering from syphilitic nervous disease have been treated in our division of the Neurological Institute.

We assume that it is admitted that salvarsan destroys the spirochetes of syphilis. It can destroy them only by being brought into contact with them. There is no *Fernwirkung* about it. The spirochetes that cause the well-defined diseases that are called syphilitic diseases of the nervous system must be either a more resistant type or species than the average or they must have a special capacity for withdrawing from the arena in which combat with the spirillicide is waged. Otherwise such disease would not occur so often in individuals who have been given what has been conceded to be adequate treatment.

That salvarsan shall fulfil its promise we must learn how to give it. The gasoline engine probably was more instrumental than any other agency in making the twentieth the most noteworthy of all the centuries. It took experts a long time to determine its application and efficiency. It shall not be determined in a day how to give salvarsan efficiently. Already we have learned something: to wit, that one dose does not cure, save rarely and under most favorable circumstances; that the objections to the intramuscular and subcutaneous injections are of such a nature that the intravenous method of administration is preferable; that the same quantity of salvarsan injected into the veins is not such a potent spirillicide as when injected into the muscles; and finally that in cases of long-standing syphilitic disease salvarsan must be given repeatedly, in many instances in full doses, and in some instances the beneficent aid of other agencies, such as mercury, must be invoked.

In June, 1910, Dr. Simon Flexner of the Rockefeller Institute generously put at our disposal a sufficient quantity of salvarsan to meet our needs until it was exposed for sale. In the majority of the cases the remedy was given intravenously; about twenty were given it intramuscularly. These are indicated in the table.

The diseases of the nervous system that flow from syphilis are tabes, general paresis, endarteritis and meningitis, and of these the most important by all means because of its frequency and susceptibility to cure is the last. It is highly probable that the vast majority of cases designated "cerebrospinal syphilis" have disease of the pia-arachnoid as their chief, and primary, structural change. This should not be construed to mean that the terminal lesion in such cases, if the disease progresses, is not predominately of the parenchyma. We think that the future will show that a most important guide for the physician to aid him in the diagnosis and prognosis of syphilitic nervous diseases will be the study of the cerebrospinal fluid, and particularly its cellular constituents. Our experience has already shown us that we must distinguish one case of tabes from another and one case of meningeal syphilis from another by cytologic criteria in order that we may estimate the more correctly their susceptibility to amelioration and cure by salvarsan.

We adhere to the conception of tabes formulated by Nageotte, namely, that it is characterized anatomically by an inflammatory lesion which attacks a number of sensory or motor roots at their exit from the subarachnoid space, which lesion is a generalized syphilosis of the meninges. By syphilosis is meant a special form of diffuse syphilitic lesion which is not peculiar to the nervous system from which tabes has its origin. It is characterized by a slight but very wide-spread inflammation. One of the most difficult problems for the neurologist is to distinguish certain cases of tabes from general paresis.

### THE CEREBROSPINAL FLUID IN ORGANIC NERVOUS DISEASES OF SYPHILITIC ORIGIN

We are influenced in deciding whether a case is tabes or general paresis by the findings in the cerebrospinal fluid. We believe that it is not consistent with normality that the cerebrospinal fluid shall contain more than ten cells to the cubic millimeter. In general paresis the number of cells is increased, but not enormously so, as the cerebrospinal fluid rarely shows more than twenty cells to the cubic millimeter. The globulin, however, is profoundly in excess. In fact, the globulin increase is greater in this than in any other syphilitic nervous disease. The Wassermann reaction in the majority of cases is positive, both in the blood and in the cerebrospinal fluid. In tabes, on the other hand, or possibly we should say in those cases that we are now calling tabes without a descriptive adjective such as exudative or degenerative, the cells are found to be present in numbers ranging from three or four to one hundred, and the globulin is in excess. The Wassermann reaction is often negative in the cerebrospinal fluid but positive in the blood, even though it has been influenced by treatment administered fairly recently.

Then we encounter a class of cases, clinically tabes, in which the cerebrospinal fluid shows a profound lymphocytosis, up to 1,500 cells in one instance, with upward

1. Post-Graduate, July, 1896.

of 100 polymorphonuclear leukocytes. In this type of case the globulin varies more or less in direct proportion to the number of cells found. The Wassermann reaction is almost invariably found to be positive in the blood, and often positive in the cerebrospinal fluid. No constant clinical distinction between the cases showing a positive and those showing a negative Wassermann reaction in the cerebrospinal fluid has been established.

In other words, tabes is quite a different disease in one sense from what it is in another. Without going further into the question of its pathogenesis, it may be said that study of the cerebrospinal fluid in cases of so-called parasyphilitic nervous disease suggests that the morbid process in the majority of cases of tabes, in the beginning, is a leptomeningitis which in turn conditions a root neuritis and eventually column degeneration. The majority of the cases that we see now at the Neurological Institute are in this stage, the time having come, fortunately, when we are encountering tabes before it has reached the advanced stages.

From a therapeutic point of view we believe it to be of the utmost importance to recognize this distinction between tabes in the exudative stage and tabes in the degenerative stage. We take the position that certain cases of tabes are more benefited by salvarsan therapy than by any and all other therapeutic measures, and we cite experiences to substantiate this position. But it is not every tabetic patient that is thus benefited and perhaps cured. It is only the cases in which the clinical manifestations of the disease are dependent on a pathologic process in the spinal cord which is attended by profound lymphocytosis. Examination of our table,[2] in which the salient facts of these cases are set forth, will show that the constant result of the administration of salvarsan is the profound diminution of this lymphocytosis which goes hand in hand with the patient's improvement.

Cases of syphilitic spinal paralysis or meningomyelitis, using that term in the sense established by Erb, have shown a varying number of cells in the cerebrospinal fluid, and a varying amount of globulin, both dependent, we believe, on the coexisting amount and degree of meningeal involvement. The Wassermann reaction in these cases is usually positive in the blood, and either positive or negative in the cerebrospinal fluid.

Cases of endarteritis which from their histories, age of occurrence, or ancillary phenomena, such as Argyll-Robertson pupils, were diagnosticated as syphilitic, were found only rarely to have such alterations of constituents of the cerebrospinal fluid to make it worthy of note. Some of them showed an increase of globulin and of cells and many of them a positive Wassermann reaction.

Fehling's reaction for the reduction of copper has been tried with practically every specimen of fluid obtained from the cases of this series. In one instance only was the reaction found to be negative, the case in which there was an extremely high cell-count, previously mentioned. This fact seems to indicate a resemblance between these cases of syphilitic infection and acute infections of the meninges by other organisms, in none of which cases the cerebrospinal fluid has failed to reduce the copper.

To compare our findings with those of other workers, we have taken an article by Nonne[3] as a fair standard. He reports a positive Wassermann reaction in 100 per cent. of the blood of general paretics and taboparetics. Our findings are the same. In the cerebrospinal fluid of these patients he reports positive Wassermann reaction in 85 to 90 per cent. by the original method and even higher by the method in which larger quantities than 0.2 c.c. have been used. We have for the last two years used 1 c.c. of cerebrospinal fluid and found the Wassermann reaction positive in 92 per cent. of these cases. Ninety-five per cent. of Nonne's cases show an excess of globulin and cells in the fluid, while 86 per cent. of ours show an excess of globulin, and 71 per cent. an excess of cells.

In tabes Nonne does not give the number of cells found, merely saying they are in excess of those usually considered normal, say from 6 to 10 cm. We have classed together cases which we call degenerative tabes and exudative tabes, cases, as mentioned elsewhere, which are clinically indistinguishable, yet show vast difference in the amount of globulin present and the number of cells.

His cases of tabes show an excess of globulin and cells in 55 per cent. of cases; ours an excess of globulin in 33 per cent., and excess of cells in 60 per cent. His cases give a positive Wassermann reaction in the blood in 60 to 70 per cent.; ours in 66 per cent. His give a positive Wassermann reaction in the cerebrospinal fluid in 100 per cent. by the method of using larger quantities; ours in only 41 per cent.

Taking his cases of cerebrospinal lues as the same type as those we have called meningomyelitis and cerebral syphilis, that is, cases showing bilateral spastic phenomena in the lower extremities with or without cranial nerve involvement, his figures are positive Wassermann reaction in the blood of 80 to 90 per cent. of patients; ours, 88 per cent. There was positive reaction in the cerebrospinal fluid of almost all his cases; whereas only 43 per cent. of our cases give a positive reaction. His show a globulin excess in in almost all cases; ours, in 86 per cent. His show excess of cells in almost all cases; ours, in 70 per cent.

Mott, Hauptman and almost all writers are agreed on the very high percentage of cases in which all four reactions are positive in cases of general paresis. As can be seen in the table of our cases,[1] very little change has been effected in the serum and cerebrospinal fluid of those patients whom we are able to follow.

In tabes, however, and in cases we call meningomyelitis, there will be a greater disparity noticed. This, we are convinced, is due to the patient having a better insight into the onset of his disease and resorting more or less to medication. This medication must influence these findings. Many of our patients, being men of financial prosperity, have at some time or other undergone protracted treatment with mercury and iodids, frequently immediately before coming to us, and this may account for the lower percentage of positive results we report.

In many of these cases the laboratory findings have been much affected by treatment, either recent or remote, and the findings must always be somewhat uncertain, depending on this factor.

Our experience has been that all these four reactions are affected in very different ways. For instance, the globulin may entirely disappear, while there are still a considerable number of cells present, as in one case in which the cells fell from ninety-six before treatment to sixty-eight two months afterward, the globulin entirely disappearing. In still another case recently encountered

2. The table, which is here omitted on account of lack of space, is included in the authors' reprints, which may be had by sending a stamped addressed envelope either to the authors or to THE JOURNAL.
3. Nonne: Deutsch. Ztschr. f. Nervenheilk., Sept. 18, 1911.

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in which the cells were twenty-six in number and the globulin in excess, a week after treatment the number of cells had risen to ninety-six while the globulin had disappeared.

Claims have been made that differential diagnoses can be made in the laboratory alone. These, however, have emanated chiefly from those working solely in the laboratory. Our experience does not substantiate such claims.

We must still make our diagnosis from the clinical signs which the patient presents. The laboratory findings may then be used to confirm our diagnosis or to differentiate the finer shades and will be of the greatest assistance in giving a prognosis and in indicating what effect the treatment is having.

### THE DOSE OF SALVARSAN IN SYPHILITIC NERVOUS DISEASES

The average dose of salvarsan for an individual suffering from diseases of the central nervous system whose vitality is not conspicuously impaired is the contents of one ampule (0.6 gm.). In patients whose blood-pressure is high (above 165 by the Stanton apparatus) and in whom there is very distinct evidence of cardiovascular degeneration, not more than one-half a dose should be given the first time. If the first administration is not followed within a fortnight by a chemical and microscopic evidence of cessation of activity of the syphilitic poison and the pathologic process conditioned by it (negative Wassermann reaction, diminution of globulin, profound numerical reduction of lymphocytes in the cerebrospinal fluid) the dose should be repeated. The second dose should be the same as the first unless some special reason exists for increasing or diminishing it. On the other hand, if the first dose is followed by indications of cessation of activity of the pathologic process, the second dose should be delayed for from six weeks to three months. The amount that shall then be administered will again be determined by the obtainable evidence of the effect of the former dose.

Physicians who have had much experience with salvarsan in the treatment of syphilis in what may be called its florid or active stages are apparently inclined to give the remedy in small doses and at frequent intervals, that is, from a week to two or three weeks. It has not been our experience that organic diseases of the nervous system or constitutional disorder, such as syphilitic neurasthenia, exudative tabes, meningitis, are best treated by frequently repeated small doses. On the contrary, we have had much experience that tends to show that these cases (cases, that is, of patients who have a fair amount of vitality), other things being equal, are best treated by the administration of the remedy in full doses. We give the second, third and even fourth dose sooner now than we did a year ago, which may be construed to mean that we have become divorced from the idea that one dose of salvarsan is competent to overcome syphilis of the nervous system. We always tell patients before they receive their treatment that they are certain to have a second and possibly several. The dose of the remedy subsequent to the second injection (which with us is almost invariably a full one) depends on the laboratory findings in the blood and cerebrospinal fluid and the condition of the patient. One of the most extraordinary features of salvarsan therapy of organic nervous diseases is the enormous physical uplift which many of these patients get, and which is attended not only by a feeling of well-being and improvement on the part of the patient, but by an increase of weight. We have a score or more of such examples.

### TECHNIC OF ADMINISTRATION

The contents of an ampule of salvarsan (0.6 gm.) are dissolved in 100 c.c. of boiling freshly distilled water. This gives a clear, intensely acid solution. From 20 to 30 minims of a 15 per cent. solution of sodium hydrate is added to this, i. e., a sufficient quantity to make the solution mildly alkaline. In some instances the former quantity suffices, while in others full 30 minims are required. When the sodium hydrate is added a heavy precipitate, which clears up as the neutral point is reached, is thrown down. Even when the mixture is shown, by its effect on litmus paper, to be slightly alkaline there is occasionally a slight opalescence. We have found that the administration of salvarsan in solution possessed of such opalescence is more likely to cause nausea and other disagreeable symptoms than a solution of salvarsan in which the alkalinity has been carried a little further and the mixture is quite clear. The solution thus prepared is made up to 300 c.c. by adding distilled water at the boiling point. The solution is now ready for administration at blood-temperature. We have been in the habit of administering this from an ordinary irrigating can or glass vessel elevated about 2½ or 3 feet above the bed. A small quantity (from 2 to 4 drams) of saline is allowed to fill the tube and run into the vein before any salvarsan is put into the vessel so as to make sure that there will be no extravasation of salvarsan about the vein. A free flow having been established, the salvarsan is allowed to run in slowly (from ten to fifteen minutes) so that no dyspnea or other discomfort shall be experienced. A small amount of saline is then allowed to follow this to prevent any leakage from, or lodgment in, the vein of the salvarsan.

The only unpleasant local manifestation we had from salvarsan administered in this manner was one case of phlebitis extending from the point of injection to the shoulder-joint. In this instance the fluid was presumably too hot, though certainly not above 99 F.

It is advisable to use a short needle without a long beveled point, for a needle with such a point will sometimes penetrate the opposite wall of the vein before the lumen of the needle coincides with the lumen of the vein. A needle of too small caliber is a disadvantage, requiring a high pressure. The salvarsan will otherwise flow so slowly that clotting of blood may occur about the mouth of the needle.

For the intramuscular injection we use, only when the intravenous method is for some reason not feasible, a solution prepared as follows:

The contents of an ampule, say 0.6 gm., are dissolved in 5 c.c. of boiling distilled water; the mortar in which the mixture is to be made and the pestle should be kept warm to permit the most rapid solution possible as unnecessary exposure to the air is not desirable. A solution of slightly syrupy consistency results. This is alkalinized as before with 15 per cent. sodium hydrate solution. From the admixture of the sodium hydrate and solution of salvarsan a heavy paste results. This should be absolutely uniform in consistence or a clear solution will not be obtained later. Again, on passing the neutral point, this paste becomes transformed into a liquid and is then made to 20 c.c. with boiling distilled water.

This is a more difficult solution to make than that which we use for the intravenous injection. Solutions are also made in iodipin and other oily preparations. We have not used them, but we have obtained good results from the intramuscular injections with pain of

greater or less severity, but no unpleasant local lesions such as sloughing with watery solutions. It is advisable when this form of administration is resorted to that it be given in two parts, one of 10 c.c., say, into each buttock. An ice-bag should be kept applied to the part and massage administered over the area once or twice daily for a few days. When this is done patients are frequently able to go about their work suffering only the inconvenience of pain.

Patients who are given salvarsan intravenously are kept in bed after each administration for from one to three days. They are given a gentle purge before the administration and a very light meal several hours before. For six or eight hours afterward they are given nothing to eat or drink. They are urged to keep warm and to avoid any exertion whatsoever. By adhering to this routine our patients had very little discomfort; very rarely has one of them displayed any elevation of temperature.

Dr. Kaplan, director of the clinical laboratory of the Neurological Institute, has directed our attention to the occurrence of urobilinogen in the urine of every patient who consumes alcohol habitually after salvarsan administration, whereas it does not occur in those who are abstainers.

### THE RESULTS OF SALVARSAN THERAPY IN ORGANIC NERVOUS DISEASES

In spite of reports deprecating the use of salvarsan in syphilitic diseases of the nervous system, we are convinced of the advisability of its employment not only in what may be called acute conditions, but also in some which can only be regarded as degenerative cases. Arsenic is undoubtedly a tonic of great value and even if this were its only effect in these latter cases, its use would be justified. But it is not. We have experience which attests its remarkable curative value. To illustrate some of the more marked benefits we have seen follow its administration, several cases are quoted in some detail.

The table,[2] however, should be consulted for information concerning the therapeutic value of salvarsan in seventy-five unselected cases of luetic nervous disease.

It is difficult to summarize in a few lines the information of the table. An attempt is made therein to set forth the age and sex of the patients; the leading symptoms of the disease and their duration, the physical signs of the disease on which the diagnosis is largely if not wholly made; the alleged local lesion and the treatment which was administered to combat the infection; the chemical and microscopic findings in the blood and cerebrospinal fluid before the administration of salvarsan and after such administration (as a rule six weeks or longer after); the time when the dose was repeated, the results from such second or third administration and finally the remote results. In many instances the remote results are the results a year after administration.

We offer statistics of thirty-six cases of tabes in various stages of the disease. Some of these we classify as exudative tabes because of the cerebrospinal fluid findings indicating an active process in the meninges, which may be construed, in the majority of instances at least, to be cases of the disease that are less advanced than those called degenerative tabes. Of these thirty-six cases, twenty-two showed striking and, in some instances, remarkable improvement, both subjective and objective. In nearly every instance there was a decided increase of weight and a subjective feeling of bettering. In many instances the pain was mitigated or relieved and in the majority of instances the ataxia was very much improved. In two cases, in which the observation was corroborated by several of the staff of the institute, the pupils, which were reported on examination to be unresponsive to light, regained that capacity.

As examples of profound improvement we may quote Case 6, a case of tabes with most alarming attacks of laryngeal crises (so much so that in one attack the patient was put on the operating-table). He has now been almost entirely free from attacks for upward of a year and during this time has been working hard on a farm. In Case 2, a physician has been enabled to resume practice after three injections of salvarsan.

**A tailor, aged 36, had syphilis eighteen years ago. He came complaining of severe shooting pains in the legs and arms and of gastric crises, occurring frequently and lasting several days. He showed considerable ataxia, absent knee- and ankle-jerks and Argyll-Robertson pupils and was much emaciated.**

**The Wassermann reaction was positive in the blood but negative in the cerebrospinal fluid. The latter showed no excess of globulin or cells. He was given full doses of salvarsan in January, 1911. After a week he had no more gastric crises and the pains in the legs and arms were much reduced. In August he was at work, the only pains being about the hips, and he had grown from an emaciated to a well-nourished man. When he was first ill he could hardly walk; during the summer he could walk without assistance carrying a valise.**

**He returned to the clinic in the late summer and said he again had pain. He was given a second dose in September. In November he had developed a Charcot joint in the foot and another full dose was given. At this time the Wassermann reaction and the blood were negative. It is, of course, impossible to say what influence salvarsan has had on this joint, but it has most assuredly put the man on his feet again, very definite improvement having taken place after each of the first two doses, and, as in many other cases, the pains being much relieved; yet in his cerebrospinal fluid he showed no evidences of active syphilis.**

Another instance of great improvement is Case 11, in which the patient had been under our treatment for two years during which time mercury had been given hypodermically and through the skin without particular improvement. The first injection was given April 22, the second on June 21, 1911; the third on Feb. 14, 1912. He maintains that he is better than he has been in years. His blood and cerebrospinal fluid showed negative Wassermann reaction on April 6, 1912. Case 16 is similar.

Many of these patients have been under observation and treatment by one of us for many years, so that we are in a position to contrast the results obtained from the treatment by mercury and by salvarsan, and I have no hesitancy in expressing the belief that the results obtained by the latter are incomparably better than those obtained by the former. In none of our cases of tabes have we supplemented the treatment by the use of mercury, and as we have long held that iodid of potassium is injurious rather than beneficial in the treatment of tabes, it need scarcely be said that that remedy has not been employed in any of these cases. In other diseases than the parasyphilitic, we have frequently given mercury, iodin and potassium iodid to supplement the salvarsan treatment and often with benefit.

We have administered salvarsan systematically and earnestly in nine cases diagnosticated as general paresis. In two of them it was difficult to say whether the diagnosis should be tabes or paresis. It was in these and in one other in which there was unanimity of opinion as to the diagnosis of paresis, that great improvement took place.

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In Case 37, the patient was a man, 47 years old, who had become infected when he was 34. He received vigorous conventional treatment for four years, and every year since then he has taken mercury. A year before coming under our observation he had attacks of vertigo and vomiting which responded to antisyphilitic treatment. After this he became garrulous and childish in his behavior and displayed lack of insight. Physical examination revealed a fine tremor of the hands, tendon-jerks very lively, pupils unresponsive to light, right larger than the left, a slight but obvious indistinctness of speech, blood Wassermann positive, cerebrospinal fluid Wassermann negative, globulin minus, cells 14. Two days later, injection of 0.6 gm. salvarsan; no discomfort following the injection. Dec. 5, 1911, it is noted he has felt well all summer, been to business steadily, played golf and comported himself as a normal individual. Examination on April 2, 1912, showed the blood and cerebrospinal fluid to be negative, and the pupils were responsive to light.

A patient with general paresis, who made very striking improvement and then died abruptly several months after he had been discharged from the asylum to which he had been committed, was a professional man, 31 years old, who had a local lesion on the finger when 22. He had the orthodox treatment from the professor of syphilology in the university where he was a student, and remained well until the spring of 1911 when he became restless, nervous, irritable, combative, unresponsive; bartering, trading, speculating, planning; the victim of profound motor unrest. Examination showed absent tendon-jerks, Argyll-Robertson pupils, facial and manual tremor. Blood and cerebrospinal fluid positive, globulin plus, cells 11, Fehling's plus. First injection of salvarsan May 28, 1911. The reactions remained negative for five weeks without improvement in the mental state. Shortly after the second injection, July 5, he began to show rapid improvement and by August 1 he was discharged from the asylum. August 2 he was given a third injection, September 12 the fourth, October 10 the fifth. October 10 it was noted that he showed no mental deterioration. He returned to his professional work and comported himself as he did when well. Nov. 28, 1911, while sitting smoking and talking to friends he had a series of convulsions followed by hemiplegia and died within twenty-four hours.

Cessation of symptoms, indeed what may be termed an intermission in the course of paresis, occurs every now and then, but I have never seen a case in which symptoms seemed to disappear entirely as they did in this case. That the outcome of the disease was not influenced, however, was shown by its termination. Another patient in this category who was improved was Patient 40, whose case was diagnosed as taboparesis. Neither the intensity of the symptoms nor the course of the disease seemed to be in any way influenced by repeated injections of salvarsan in any of the other cases save that of one patient who may or may not be cured.

A chauffeur, aged 40, came to us in November complaining of constant headache, poor memory and rapidly increasing deafness, all of two weeks' duration. From the physical signs it was manifestly a case of general paresis. After three full doses of salvarsan he returned to his work. The case is quoted to show the effect of treatment on the hearing. When first seen he heard a low whisper at 4 feet only. In a month and a half he received three full doses and the hearing improved until he could hear a low whisper at 23 feet. He cooperated well at all times and these results are taken from many examinations kindly made for us by Dr. Deneh.

There are nine cases in our series diagnosticated meningomyelitis and it is these cases and those diagnosticated as meningitis that show the most gratifying response to treatment. Without entering into detail as to the clinical delineation of the cases included under meningomyelitis, we may say we have grouped under this heading all cases of exudative syphilis in which both the meninges and the cord gave evidence of being simultaneously involved. Some of these cases had likewise been under treatment by one of us for several years with mercury and potassium iodid; such particularly as Nos. 46 and 53, and it was not until they were put on salvarsan therapy that the gratifying condition, in which the patients now are, developed.

There were six cases of cerebral endarteritis of luetic origin. In only two of these was there profound improvement.

In one, a locomotive engineer, aged 63, who denied syphilis, noticed that for three months he had grown so weak that he could not manage his engine. He had a desire to sleep constantly; paroxysmal pain in left temple; frequent crying spells, and oftentimes difficulty in speaking. He had become very forgetful and his weight had gone off 13 pounds. He showed no abnormal physical signs except a slight arteriosclerosis.

The Wassermann reaction in the blood was positive. He received a full dose of salvarsan intramuscularly and three weeks later returned to work free from symptoms and has remained so since, having gained 20 pounds.

In our list there are seven cases of what may be termed brain syphilis, that is, infections of the meninges or substance of the brain.

CASE 61.—A man, 34 years old, whose infection was of three years' duration, complained of headache, loss of weight, vertigo with transient blindness. Blood plus, cerebrospinal fluid minus, cells 7, globulin 0, Fehling's plus. Intravenous injection, 0.6 gm. of salvarsan, July 26, 1911; repeated Sept. 4, 1911. Patient reports, April 5, 1912, that he has been quite well since the second injection.

CASE 65.—Patient a man, 36 years old, who denied syphilis and whose blood was plus, gobulin plus, cells 9, Fehling's plus, and who was afflicted with epileptic attacks, received his first injection intravenously July 22, 1911, the second on March 20, 1912. Has not had a convulsion since the first injection.

CASE 67.—Another patient with epilepsy who had infection when 31 years old has had no epileptic attacks since the first injection.

There are three cases of spinal meningitis probably more of the dura than the pia. One of these showed no improvement and one of the patients (Patient 71, who had been treated for many years as a case of lead poisoning, but whose blood and cerebrospinal fluid were plus, globulin plus, Fehling's plus, cells 4) experienced no relief from injections of salvarsan or mercury and the iodid. This case will eventually be published in detail. Another patient showed improvement lasting for a short time, but pain recurred as severe as ever. The third got nearly well.

Two cases which must be classed as pachymeningitis deserve mention: One patient received an injection of salvarsan a year ago. He was entirely free from pain for nine months, when it returned. A month ago he received a second injection and so far has again been free from pain.

In a similar case the patient was relieved for only a fortnight and then the pain returned persisting up till a second injection a month ago, since when he has been free. The number of cells in the first case was 5 per cm.: in the second, 143. It is interesting to compare them with still another similar case, who had been considered for seven years to be suffering from lead-poisoning. This man had also 141 cells per cm., received no appreciable benefit from the salvarsan and finally died.

We have had a few cases of syphilitic infection which do not permit of clinical designation unless we call them

by the chief symptom of which the patients complain, such as syphilitic neurasthenia, syphilitic migrain, etc., in which the four reactions were present and in which the patients made striking recoveries after salvarsan had been administered. We refer most briefly to two of these cases:

A lady, 60 years old, whose husband had suffered for many years from tabes and had developed in addition, a year before his death the typical features of general paresis, had her first attack of "nervous prostration" when she was 52 years old. The chief features were weakness, inertness, emotional irritability, sensitiveness and a sensation of profound exhaustion; in short, prostration without attributable cause. She remained abroad, where she had first developed these symptoms, for two years, taking various "cures" meanwhile. She gradually recovered and remained comparatively free from symptoms, if she did not overtax her strength, for six years; then she had another attack. The only objective signs that we could elicit were cardiovascular sluggishness and pupils which, though they still responded to light, did so very slowly and through a small arc. The Wassermann reaction was positive in blood and spinal fluid. After the first intravenous injection of .06 gm. salvarsan they remained negative for two months and she became astonishingly well. At the end of that time the symptoms began again and the reactions were found to be positive. She received a second similar injection, and since that time, now eight months, she has been quite well, and the reactions have remained negative.

The second case is that of a lady, 44 years old, whose complaint was of the symptoms that constitute typical migraine. Objectively she had glaucoma of the right eye for which an iridectomy had been done two years before, and slightly increased tension of the left eye. From certain facts of her history in the few years succeeding marriage, we were led to make a Wassermann test of her blood which on three different occasions and by two competent pathologists was found to be strongly positive. She received forty intramuscular injections of sublimate, an equal number of inunctions, both in large doses, and for a time, namely, four months, she was relieved of the migrainous attacks and the sensation of tension in the eye. At the end of that time the symptoms returned and she was given mercury again with similar results. The Wassermann reaction for the third time becoming positive, it was then decided after mature deliberation and wise counsel to administer salvarsan, despite the slight degree of optic atrophy. She received a full dose in November, 1911, and two weeks later a half dose. She remained free from symptoms until the present writing, March 1, 1912. We propose now to repeat the treatment, if the reactions are positive.

Some of the patients showed such extraordinary results from salvarsan administration that they demand special description.

F. S. A., a clerk, aged 25, who denied syphilis, came to the institute in August, 1911. He was sent from one of the ophthalmic hospitals as presenting a case of brain tumor. His complaint was of constant supra-orbital headache; diplopia; profound general weakness, and a tendency to sleep most of the time. This latter amounted nearly to coma on his admission. These symptoms had been progressing for six weeks. He showed exaggerated knee- and ankle-jerks, the Babinski signs on both sides, paralysis of the external rectus muscle of each eye and an absence of the senses of taste and smell.

The Wassermann reaction was positive in both the blood and cerebrospinal fluid. The latter showed an excess of globulin and 134 cells per cubic millimeter. He was given two full doses of salvarsan, a week apart; within a few days after the first dose he experienced a marked relief from his symptoms. In less than three weeks after the second injection he returned to work, free from all symptoms.

In the six months since then he has gained 45 pounds. The Wasserman reaction in the blood remained negative until March, 1912, when it was found to be positive. Then a third full dose was given. Meanwhile he had been entirely free from symptoms.

And this is illustrative of a point to which we call attention: The patient may be clinically quite well after salvarsan administration, while the laboratory tests show the necessity for further vigorous treatment.

Another case giving such gratifying results was that of a woman who was aged 38, but who looked over 50 years of age. She complained of "breaking" pains in the hands and feet, constant headache, insomnia, frequent vomiting and marked constipation—all these of one and a half years' duration. The only evidences of her having had syphilis were that she had had four miscarriages and only one child, a cripple, out of three that were born alive, survived. She showed a slight Romberg, exaggerated knee- and ankle-jerks, unequal pupils which reacted sluggishly to light and pronounced emaciation and general weakness.

The Wassermann reaction was positive in the blood and cerebrospinal fluid. The latter showed 1,480 cells per cubic millimeter and a marked excess of globulin. She was given a full dose of salvarsan and a month later the cerebrospinal fluid showed a reduction in the number of cells to 148 per cubic millimeter and decidedly less globulin, though the Wassermann reaction was still positive. The dose was repeated and two months later she is a well-nourished-looking woman, doing a full day's work, and complaining only of slight weakness in the legs and of some vertigo on stooping. All reactions are negative.

The man in the street with a newspaper in his hand tells us that there is a national prejudice in France against the admission of the fact that salvarsan is curative of syphilis; the syphilitic in our consulting-room chair tells us that Doctor So-and-So has told him that salvarsan is a failure; the medical press teems with articles setting forth the fact that salvarsan does not cure cases of advanced tabes, general paresis and other diseases in which the tissues which are fundamentally attacked have become destroyed. If any of these statements have the slightest effect on a physician who is earnestly searching to determine the cause and cure of disease, it transcends our understanding. Metchnikoff showed, a few years ago, that syphilis could be transmitted to apes, and this vulnerability of the lower animals has permitted countless investigators to demonstrate the fact that salvarsan can kill all the spirochetes in an infected animal. It is not the only agency capable of overcoming syphilitic infection. Mercury is such an agency. If it can be given to the syphilitic in sufficient doses, that is, in amounts that will neither impair his health nor kill him, it will rid him of the syphilis. It has been a trusted weapon in the combat of syphilis for a long time. It has practically been the only one. Steam was for a long time practically the only motive power. It was fairly satisfactory. Few scoffed at it and no one scorned it. When electricity was introduced as a motive power, it was found to be more reliable, more efficient and more economical than steam. It has not yet replaced it, however; perhaps it never will. To-day these two agencies are used side by side, one often supplementary to the other. The profession is in a similar position relative to mercury and salvarsan. Salvarsan has not replaced mercury; its therapeutic potentialities are not yet fully shown. But of one thing we feel convinced, and that is that the treatment of diseases of the nervous system that flow out of syphilis is far more satisfactory with salvarsan than with mercury. And this statement is made without dogmatic emphasis and without prejudice.

149 East Sixty-Seventh Street.

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# SIMPLE METHODS IN INFANT-FEEDING *

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DETROIT

By way of introduction I wish to mention briefly a few already well-known facts. The Biedert theory, which dominated for many years American pediatric practice, held the proteid as the essential disturbing element in infantile digestion, and on the basis of this belief there was developed the long popular, although difficult and empirical, percentage system of feeding. The work of Czerny and Keller, attacking the problem of nutritional disorder from the standpoint of metabolism, demonstrated the comparative innocuousness of the proteid, and the importance of the rôle of the fats. Finkelstein and his school carried toward their logical conclusion the metabolism observations of Czerny and Keller and demonstrated the relationship of the carbohydrates, the salts and the whey medium itself to the physiology and pathology of the nutrition of infancy. Finkelstein also demonstrated the important principle that each individual infant has its own limit of nutritional tolerance, within which it must be fed. If the child be fed beyond the limits of its tolerance, it starts on a downward course, not *in spite* of the quantity of food it is receiving, but *on account* of the quantity — the so-called paradoxic reaction. This principle is of the utmost importance. It means that each infant, so far as its nutritional requirement is concerned, is a law unto itself — that in the feeding of a given patient, that patient must be regarded as an entity not to be adapted to an empirical tabulation with its corresponding empirical food formula. We have as our guides for determining its requirement, the age of the patient, its weight, the weight of the average normal child of the same age — *Sollgewicht* — and the principle of caloric feeding. All this, instead of complicating infant-feeding, serves by reducing the procedure to a logical rationale to render the task simpler for the physician, for the mother and certainly for the child.

We find, however, in handling large numbers of infants, that the average tolerance-limit is sufficiently wide to permit of certain generalizations, and I wish to confine my remarks to a discussion of the methods to be pursued in the routine feeding of normal babies. For the methods themselves I claim no originality. They will be recognized as those used by Finkelstein. I wish merely to testify as to the effectiveness of the methods as demonstrated by experience with a rather large material during the past year. The methods used by Finkelstein in the hospital have been employed in the dispensaries of the United Jewish Charities, the Franklin Street Settlement and the Salvation Army, as well as in private practice. Dispensary patients furnish the least favorable conditions for artificial feeding, yet experience with these has been practically uniformly successful, so that I am urging the simple methods there found effective for use in routine feeding in private practice. Briefly stated, milk dilutions are used instead of cream, top milk or percentage mixtures, and sugar is added to a definite percentage. For children of the first six months of life, the dilution employed is half milk and half water, plus 5 per cent. sugar; from six to nine months, two-thirds milk and one-third water, plus 5 per cent. sugar; from nine months on, whole milk.

* Read before the Academy of Medicine, Kalamazoo, Mich., March 26, 1912.

Through the first six weeks of life there has been recommended the employment of one-third milk with two-thirds water, plus 4 or 5 per cent. sugar, but it is difficult to cover the child's requirement with this dilution. Personally, I no longer use one-third milk, save in exceptional cases, and am using one-half milk from earliest infancy. Let us consider briefly the underlying principles, then in further detail the methods employed.

Heubner and Rubner showed that the healthy infant requires a definite number of calories for each kilogram of its body-weight. We may apply their findings as follows:

**First three months, requirement, 100 cal. per kg.**
**Second three months, requirement, 90 cal. per kg.**
**Third three months, requirement, 80 cal. per kg.**
**Fourth three months, requirement, 70 cal. per kg.**

It is a simple matter to reduce this computation to ounces, but decimals are for our present purpose more convenient. The caloric value of a liter (quart) of milk is variously estimated, but it is correct enough to assume for clinical purposes the value of 600, a little under its value as determined *in vitro*. There need be no distinction made in regard to caloric value between mother's and cow's milk.

We may assume as the average normal weight of the new-born 3,000 gm. and that the normal rate of growth is 500 gm. per month. Therefore the average normal weight is

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|---|---|
| **At birth** | **3,000 gm.** |
| **At one month** | **3,500 gm.** |
| **At two months** | **4,000 gm.** |
| **At three months** | **4,500 gm.** |
| **At four months** | **5,000 gm.** |
| **At five months** | **5,500 gm.** |
| **At six months** | **6,000 gm.** |

These figures are no doubt a little under our average local weights, but still are an effective guide.

The average child then should be fed according to the requirement of the average child of his age. For instance, we feed a one-month old baby 350 calories daily. If its weight is more than 3,500 gm. a general adherence to the schedule will prevent going beyond the infant's tolerance. If it is less, the child is so much the more rapidly brought to the point at which it should be. With the gradual increase in weight the food is gradually increased in quantity, hence in caloric value. Let us consider the mixtures previously mentioned.

| | |
|---|---|
| **One-half liter of milk** | **provides 300 cal.** |
| **Five per cent. sugar** | **provides 200 cal.** |
| **Caloric value one-half milk and 5 per cent. sugar** | **provides 500 cal.** |
| **Two-thirds liter of milk** | **provides 400 cal.** |
| **Five per cent. sugar** | **provides 200 cal.** |
| **Caloric value two-thirds milk plus 5 per cent. sugar** | **provides 600 cal.** |

Example: Child of seven months should weigh 6,500 gm. Requirement at 80 calories per kg., 520 cal. This is furnished by 850 c.c. of two-thirds milk mixture. Therefore prescribe five feedings in twenty-four hours of 170 gm. or 5⅔ oz. each.

This brings me to the second essential feature of the simple method: long feeding-intervals, i. e., five feedings in the twenty-four hours. We are greatly indebted to Czerny for the emphasis placed in recent years on the longer feeding-interval and the discontinuance of the two-hour and three-hour schedule, involving twelve, ten or eight feedings per day. In the routine feeding of well

infants, feedings should be limited to five in twenty-four hours. One must bow at times to prejudice and long-established custom and, in individual instances, compromise on a six-feeding schedule, but it may be stated as a rule that after the first few weeks five feedings should be insisted on.[1] Night feedings are unnecessary. My usual schedule is one feeding at each of the following hours: 6 a. m., 10 a. m., 2 p. m., 6 p. m. and 10 p. m. Between 10 p. m. and 6 a. m. milk feeding is not necessary. The child during the night may drink boiled water *ad libitum*.

As to choice of sugars, maltose dextrin is the best for our purpose, being especially advantageous probably owing to the contained dextrin. Lactose may be used with impunity in the case of the well child, although dyspeptic disturbances or constipation are more frequent with its use; also weight increase does not seem to be so rapid as with the first-mentioned sugar. Cane-sugar is permissible. One frequently finds that with the mixture above employed, the child gains up to a certain point, and then stands still, although its food requirement is being covered. If one fears that one is not yet warranted in passing on to the dilution of increased strength, 10 gm. of ordinary wheat flour may be added to the day's feeding, and practically invariably the increase is again resumed. This procedure is to be recommended only beyond the third month. Incidentally it may be mentioned that this simple procedure of addition of flour to the day's feeding frequently suffices to overcome a constipated tendency. In other instances in which constipation exists, oatmeal water containing ½ to 2 ounces of oatmeal to the quart may be used as diluent instead of water.

A fourth important principle is the limiting of the total of food mixture taken to a liter a day—a principle which applies up to the very end of infancy—and incidentally, so far as milk is concerned, through the second year. This maximum quantity can generally be reached by the fourth month, and even earlier.

One-third milk feeding, as before mentioned, often fails to meet the requirement. Experience shows that it is quite safe at a very early age to begin with one-half milk. One-half milk will be found very satisfactory through the first six months of life. One must not hold too arbitrarily to age divisions, however. When the individual patient ceases gaining on his hitherto appropriate mixture, the next step is to increase to two-thirds milk, which one will find a not too radical increase. The results with two-thirds milk are more than gratifying. One can carry the baby well up into the fourth quarter of the first year with steady and satisfying gains in weight by means of it, and it provides a convenient stepping-stone to the use of full milk. Full milk may be employed somewhat earlier than we have previously been taught, that is to say, whenever the increase on two-thirds milk and 5 per cent. sugar plus 10 gm. flour ceases —which generally is in the ninth or tenth month. I generally request, on beginning whole-milk feeding, that the upper ounce of cream be removed from the quart bottle, rapidly re-adding this as soon as it is evident that the child is not going to react with vomiting or constipation.

We now come to a principle hitherto little recognized or emphasized—that is, the early addition to the infant's diet of fruits, vegetables and broths. It is a matter of my routine practice in the case of the healthy infant (and many sick ones) to give daily from the sixth month on, one feeding including broth (a small saucerful of chicken, mutton or beef broth); stewed fruit (stewed apples, stewed prunes, stewed apricots), and a vegetable (stewed turnips, stewed carrots, spinach — the last-mentioned possibly, on account of its relatively high iron content, being the most desirable). The fruit and the vegetables must be thoroughly cooked, rendered to a state of fine subdivision by passing through a colander and given in tablespoonful quantities each.

The broth probably is valuable as a vehicle for salts, which aid in the water retention. The fruit and vegetables, save for the small quantity of carbohydrates contained, are probably negligible as to food value; their usefulness is probably due to the furnishing of organic salts and acids which are utilized advantageously in the body metabolism. Suffice it to say, the infant takes readily, often greedily, to these additions; he is less inclined to demand larger quantities of milk; the longer feeding-intervals are much more easily enforced, because the mother is quite satisfied with the quantity and variety of the baby's diet; laxative effect is frequently evident; the colored vegetables by virtue of contained iron counteract the anemic tendency; and it may not be going too far to say that a certain organic something seems to be supplied which is lost in the milk-heating process. I hesitate to use the term antiscorbutic or antirachitic in this connection, however.

Let me briefly recapitulate the principles herein set forth.

1. Milk dilutions instead of percentage formulas.

2. Long feeding-intervals: five feedings in twenty-four hours, four hours apart.

3. Mixed carbohydrates: the addition of 10 gm. of flour and the occasional use of oatmeal water as diluent; maltose dextrin as sugar.

4. Limiting the total quantity of milk mixture to 1 liter (one quart) a day.

5. The employment of broths, fruits and vegetables from the sixth month on.

The least intelligent nurse can readily prepare a proper milk mixture. It is simply necessary to say, for instance: Take a pint of milk, a pint of water, add an ounce and a half of milk sugar, divide into five feedings, and give every four hours. There is no need of prescribing a complicated formula calling for the preparation of so much top milk, or a cream containing a definite percentage of fat and the addition of lime water. These instructions, while competently carried out by mathematicians and chemists in the milk laboratory, serve to befuddle the mother or nurse, or to discourage her to the point of driving her to the use of proprietary foods, which are more convenient and simpler to prepare, or to the too early use of whole milk. In fact, many of the published tabulations are fallacious and unsafe guides even when strictly followed, not checking up to the requirement when figured out calorically.

The longer feeding-interval acts in a twofold way as an advantage to the baby. The child has the opportunity to empty its stomach of the food already ingested before it is called on to receive an added quantity, and it demands less frequent attention from mother and nurse, who, being thus enabled to care for other domestic duties, need not slight the child or hurry it through its feedings. Particularly let me emphasize the value of the longer interval in the case of the breast-fed child. The demands on the mother are so greatly lessened as to permit her to

1. Since the writing of the foregoing, Rietschi (Jahrb. f. Kinderh., April and May, 1912) has published an important series of observations evidencing the value of from six to eight feedings in the first weeks of life.—L.

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continue her domestic and social duties without neglecting the baby. By lengthening the interval the mother's strength and patience is conserved and the adoption of a sensible schedule serves, in many instances, to defer weaning. For no matter how much improved our methods of artificial feeding may be, maternal nursing should never be abandoned until absolutely necessary. The bottle should be resorted to only after breast-feeding is no longer adequate or possible, or the period of infancy is passed.

Sociologic investigation, hygienic research, clinical experience and observation have in recent times lifted the major portion of the primary blame for infant mortality from the milk itself to our own shoulders. Certainly the canons of decency demand that that which enters the mouth of the little human animal as food shall be as clean and pure as skill and science can make it. But impure or contaminated milk is primarily responsible for only a share of infantile morbidity or mortality. We must look to-day for predominant influence in this respect to heat, housing, clothing and our own feeding-methods. Experience proves that we can aid most effectively in the infant welfare movement, can reduce the mortality among those infants concerning whom we are called on to advise, by employing simple feeding-methods — by prescribing simple mixtures that the baby can digest and by prescribing simple directions that the mother can carry out.

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## ADHESIONS OF THE COLON*

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A study of the conditions affecting the lower right side of the abdomen has resulted in the acquisition of much valuable knowledge. This knowledge has not been acquired all at once, but, as is usual, it has come slowly and only after much labor. It is a curious fact, too, that here, as in so many other instances in the history of medicine, thought has traveled in a circle and we are now describing typhlitis and perityphlitis as they were described some forty or fifty years ago. It is not to be understood, however, that during these years no advancement has been made, for the circle has been a spiral and hence considerable progress has resulted, for the typhlitis and perityphlitis of yesterday are not the same as those of to-day. During the circuit, many other important conditions have been recognized and, as each was recognized, the tendency, as is usual, was to exaggerate its importance for the time being until some other condition came to the front and was differentiated from the others. Thus, when the frequency and importance of acute appendicitis was recognized, typhlitis and perityphlitis were entirely lost sight of and the appendix was considered the source of all the trouble in this part of the abdomen. Gradually, however, we began to hear of chronic appendicitis, relapsing appendicitis, obliterating appendicitis, adhesions about the appendix, adhesions about or fixation of the cecum, adhesions of the ascending colon, cecal ulcers, membranous pericolitis, Jackson's membrane, nephrocoloptosis and finally cecum mobile.

We now know that all of these conditions are well-defined pathologic entities and that to each definite symptoms may be due. It is no longer allowable to call every case presenting irregular symptoms of pain and tenderness in the right side of the abdomen one of chronic appendicitis and immediately to proceed to remove that organ in the expectation of effecting a cure. The fact that many patients thus diagnosed and treated were found to be no better after the operation than before is what stimulated further investigation and it was just such cases as these which sounded the death-knell of the small incision, the 1-inch, the 1-½-inch and the buttonhole, etc., which at one time were supposed to show great dexterity, but which were also found not to cure the patient because, quite often, they left the real trouble unrecognized and therefore unrelieved.

Those of large experience will readily recall many cases of their own and particularly of others on whom they have had to do secondary operations because of the failure of the first to bring relief.

In all of these cases of right-sided abdominal trouble the incision should be ample, so that the entire region may be thoroughly inspected and thus the real condition not be overlooked.

The appendix is not the *fons et origo* of all of the pathologic changes found in this region. Admitting that chronic changes in and about the appendix are common and that these changes frequently give rise to well-marked and often distressing symptoms, I wish to emphasize the fact that there are many cases in which the appendix is innocent and in which the real trouble is to be found in the cecum or the ascending colon.

The conditions most frequently found are what in general may be designated as adhesions. These adhesions, however, may be quite different in character and also, perhaps, quite different in origin. The adhesions to which the attention first will be directed are those found on the posterior surface of the cecum and the posterolateral wall of the ascending colon. In some cases these may, perhaps, be better designated by the term "agglutination" than adhesions, as the peritoneal layer of the bowel seems to be simply stuck to the peritoneum of the parietal wall, without there being any visible organized bands connecting the two. If the bowel be raised up, a distinct white line frequently becomes visible showing the edge of the agglutinated surfaces and on further traction the parietal peritoneum becomes drawn on.

The appendix and its mesenteriolum may be entirely free from perceptible lesions. Many of these cases undoubtedly are of pathologic origin, but it has seemed to me that some of them are best explained by assuming that the agglutination which takes place normally during fetal life, between the original mesocolon and the parietal peritoneum, is more extensive than usual, and part of it persists after absorption of the opposed peritoneal layers has ceased. When this agglutination is extensive, free action of the ascending colon must be considerably interfered with.

In another variety of adhesions are found distinct bands of new-formed tissue extending from the cecum or the ascending colon to the parietal peritoneum, to the appendix, to the omentum or to the lower end of the ileum. These are all undoubtedly of inflammatory origin and may vary much in number, length and thickness. They frequently have a direction upward, outward and backward from the bowel to the posterolateral parietal wall.

The next condition to be described is sometimes called membranous pericolitis, or Jackson membrane. In the early stages of this condition the wall of the ascending

* Read in the Section on Surgery of the American Medical Association, at the Sixty-Third Annual Session, held at Atlantic City, June, 1912.

colon presents the appearance of being thickened or edematous, and, on close inspection, the visceral peritoneum seems to be raised from the bowel-wall by reason of the presence of a subendothelial hyaline-looking substance or exudate. The endothelial layer of the peritoneum, which is slightly movable on the bowel-wall, gradually becomes separated from the bowel as a distinct layer and beneath it covering the bowel-wall there forms another layer of endothelial cells. A raised thin, transparent membrane remains attached to the bowel at the longitudinal bands at which point small blood-vessels may be seen entering and spreading over the thin membrane. Later this membrane is almost certain to acquire attachments to the anterolateral parietal wall. In older cases the membrane becomes thicker, particularly along the line of the blood-vessels, which also become larger and more numerous. In still later stages the membranous formation becomes more intimately attached to the ascending colon. It extends from pouch to pouch of the colon and, on contracting, as all such new formations do, draws the pouches together and puckers them up, so as practically to obliterate them on the external surface of the bowel. In this stage the membrane can be removed only with difficulty and leaves the bowel raw and bleeding.

It seems almost impossible that such a condition can exist without interfering materially with the muscular activity of the bowel and thus with its function. It is quite remarkable that this membranous formation very seldom extends entirely over the cecum itself, but almost always leaves the beginning, or the blind end, of the cecum free. The appendix may show evidences of chronic trouble or it may be to all appearances normal.

In cecum mobile the cecum and ascending colon are not only abnormally movable, but also, as a rule, abnormally enlarged. The cecum is a well-defined large pouch extending considerably beyond the extrance of the ileum and the ascending colon presents a more or less perfect mesocolon which permits a considerable range of motion. The mesocolon is often so long that the cecum and a part of the colon may lie below the upper plane of the true pelvis. That such an abnormally movable organ may cause disturbance of the intestinal function and also, when it lies in the pelvis and is filled with feces, may disturb the functions of the pelvic organs in the female, in whom this condition is most frequently found, is very evident. Such a cecum, lying in the pelvis and being filled with feces, may be mistaken for a pelvic tumor, as I have personally seen; and in one case I was sent for in great haste to operate on a case of extra-uterine pregnancy. The physicians in charge had recognized a mass in the pelvis to the right side of the uterus in a woman with symptoms of early pregnancy and concluded that the pregnancy was extra-uterine. The doughy feel of the mass, together with the fact that it was easily displaced out of the pelvis into the abdomen by placing the patient in a knee-chest position, led to the recognition of its true character, and the mass entirely disappeared after a dose of magnesium citrate and an enema.

That the cecum and colon may descend with other abdominal organs as a part of a general visceral ptosis is well known, but a true cecum mobile with a real mesocolon is a congenital condition.

There is a similarity of symptoms produced by all of these various forms of adhesions, yet a careful study of the clinical history will show slight differences which, as a rule, will enable one to differentiate the cases. That the symptoms are similar might be surmised from the fact that all of the pathologic changes affect the same portion of the bowel, namely, the cecum and ascending colon. The one symptom which is practically always present in some form is that of pain, but the pain varies somewhat in location and character. Tenderness is also a very constant symptom, but it is not so circumscribed and so localized as it usually is in chronic appendicitis. Attacks of pain may come on at irregular intervals and the attacks may last from a few minutes to two or three days, but the pain is not usually very severe, nor is there so much gastric disturbance as is commonly found when the appendix itself is the chief offender. Nor do these patients usually have any rise of temperature during these periods.

Membranous pericolitis occurs most frequently in young women from 20 to 35 years of age, but I have seen one well-marked case in a boy of 12. The soreness and pain are often worse during the menstrual period. Some of the patients describe the pain as a dull ache or of a drawing character, and a few have mentioned a rather sharp pain passing around the right side of the abdomen along the line of the spinal nerves in which case I have found distinct inflammatory bands passing from the colon to the anterior or anterolateral wall of the abdomen.

Practically all of the women with membranous pericolitis are constipated, some of them quite stubbornly so, and many of them are neurasthenics. They are hypersensitive and the whole right side of the abdomen feels sore and tender. They assert that they can feel gas as it passes along the ascending colon, and this part of the bowel is often found distended with gas which can be pressed up and down in the colon and gives one the impression that the hepatic flexure is spasmodically contracted, for if steady, gentle pressure be made the resistance seems to yield and the gas disappears down the colon.

In cecum mobile we find much the same feeling of soreness or discomfort in the right side of the abdomen, but in my experience the patients as a rule have not been constipated like those with membranous pericolitis. The cecum is frequently found distended with gas and in women may then be palpated on bimanual examination. Occasionally the cecum may become filled with feces and be felt in the pelvis as a boggy tumor-like mass. When the cecum and colon are sensitive this fact may be easily demonstrated by flushing out the colon and then injecting it with air. The size and location of the cecum and ascending colon may be outlined in this way.

The cause of the adhesions which take place about the cecum and colon is not so easy to unravel. That they are of inflammatory origin, as already stated, there can be little doubt. Excluding the rare cases in which the inflammation has extended to this region from some neighboring organ or structure, there is no escape from the conclusion that the inflammation must come from this portion of the bowel itself. Until comparatively recent times the function of the ascending colon was considered of very little importance. This portion of the bowel was thought to be simply a tube through which the contents of the intestine passed on its way from the small intestine to the rectum. It is now known, however, that it has a very important function. The intestinal contents pass from the ileum into the cecum and colon in a liquid form. In this part of the large bowel they are churned up and down until the liquid part is absorbed, leaving a semisolid mass which passes on down

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the bowel. In other words, in this part of the colon the water is absorbed from the intestinal contents. From 20 to 30 per cent. of the fecal mass as it leaves the body is composed of bacteria. These are of numerous varieties, the most constant of which is the colon group.

The upper part of the intestinal tract is comparatively free from microorganisms, but these increase in number from above downward until in the lower part of the ileum, where they are found in great numbers and in their most active state, so that the intestinal contents, when poured into the colon, are very rich in bacteria.

Under normal conditions the bacteria, after reaching the ascending colon, begin to lose their activity, so that by the time they have reached the sigmoid or rectum the majority have ceased to be active and many of them are dead.

As is well known, the colon bacillus is found in the majority of all cases of appendicitis, whether acute or chronic, and, although often found in association with other organisms, it was until quite recently looked on as the chief offender in this very common complaint. Since the masterful works of Runeberg and of Heyde, however, we know that the colon bacillus plays a very minor part in the causation of appendicitis and its complications in all their forms, but that the real active agents belong to the anaerobic class.

The reason why these organisms were not discovered earlier is due to the simple fact that the cultural methods used were such as prevented the growth of anaerobes and favored the growth of aerobes. Therefore, only aerobes were found in the cultures. Both Runeberg and Heyde have shown that by the use of proper cultural methods the anaerobes are almost invariably found in all inflammatory conditions having their origin in or about the appendix.

The organisms most frequently found are the *Bacillus thetoides, B. fusiformis VII, B. ramosus, B. ramosoides, B. butyricus, Parapneumococcus, B. perfringens, B. pseudotetanus, Streptococcus anaerobicus*, etc. These organisms are practically never found alone, but always in symbiotic relation of two or more varieties, and while the colon bacillus is also found in the majority of the cases it is not a primary invader, but a follower, as are the ordinary pus organisms which are so commonly found.

These facts open up an entirely new field for investigation which already offers us an explanation of some of the complications of appendicitis which heretofore were very obscure.

These organisms are found in the beginning of the colon under certain conditions, and experimental evidence already seems to indicate that they may cause changes in the intestinal wall similar to some of those described above.

The number and virulence of these organisms present seem to bear some relation to the activity of the colon bacillus which in turn depends on the character of the food and the perfection with which digestion is carried on in the upper part of the intestines. Much further study in this direction is necessary in order to clear up the subject, but sufficient is already known to show that the solution of the cause of many of these troubles in the right side of the abdomen is to be found in a study of the flora of this part of the intestinal tract.

The treatment of the various forms of adhesions, above described, is surgical and prophylactic. As will be seen, surgical treatment is mentioned first, for the reason that prophylactic treatment will seldom be called into play until after surgical treatment has been instituted. After adhesions have formed so as to give rise to distinctive symptoms, nothing but surgery can give relief. In operating on these patients an incision sufficiently long should be made to permit a thorough examination of the entire region. This can usually be a muscle-splitting incision if properly placed.

All adhesions involving the anterolateral parietal peritoneum will give rise to pain when drawn on. The object of the operation, therefore, should be to get rid of all such adhesions. Whenever the appendix is found involved in the adhesions, it should be removed, of course. If, on drawing up the cecum or colon, what are called agglutination bands are found, these should be separated, and if any uncovered area is left posteriorly, it should be carefully covered over with peritoneum. The so-called inflammatory bands or adhesions should be divided and removed and the area left should be recovered, so there shall be no denuded areas remaining.

In the membranous pericolitis, or Jackson membrane cases, the management is not always so easy. The object to be accomplished is to get rid of the membrane and at the same time leave the colon smooth and covered with peritoneum. If the membrane is attached to the parietal wall, it should be removed and the parietal peritoneum left smooth. If the membrane is thin and transparent and attached only at points along the longitudinal band of the colon, it should be removed and the small bleeding points controlled with hot, moist sponges. In such cases this is all that is necessary. If the membrane binds together the pouches, it must be thoroughly removed so as to free them. This will usually leave considerable raw bleeding surface on the bowel. These denuded areas must be covered by using the thin, transparent parts of the membrane in the manner of Thiersch's grafts. In managing these cases considerable ingenuity will often be necessary in order to accomplish the object desired. When this part of the bowel is extensively and firmly adherent to the parietal wall, so that, when separated, large denuded, bleeding areas are left which cannot be covered, the adhesions are almost certain to recur leaving the patient in as bad a condition as before the operation. In these cases the only successful treatment is to remove entirely this part of the bowel or completely to exclude it by anastomosing the ileum to the sigmoid.

The result of operative treatment in these cases is usually very satisfactory, but in those cases of old membranous pericolitis there is a tendency to recur, as I have seen in several cases, nor is there any reason why recurrence should not take place from what little we know of the cause. If the condition is due to the character of the intestinal flora or to a special virulence of the organisms present, then we must expect that a continuation of these factors will lead to recurrence of the condition. It is here, therefore, that prophylaxis finds its place. After the case has had the mechanical condition relieved by operation, it then becomes in a sense a medical case which must be influenced by such regulations of the diet, bowels, habits, etc., as shall tend to prevent or limit the changes described.

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**Infant Foods.**—The market affords some so-called "Infant Foods" designed not by scientists with the idea of fitting bodily needs, but by commercialists with the idea of financial gain.—W. D. Chapman in *Ill. Med. Jour.*

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# UTEROVAGINAL PROLAPSE IN ELDERLY WOMEN

## TECHNIC OF OPERATION *

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In a paper[1] read before the Section on Obstetrics and Gynecology of the American Medical Association in 1911 I asked consideration of the question as to what should be the operation of choice in uterovaginal prolapse occurring after the menopause.

My reasons for presenting the question were that the problems connected with this operation have been before the profession long enough to allow some general agreement as to the best methods of operating; yet, as a matter of fact, the status of the operation is very uncertain. The first principles have not been settled. For instance, so wide is the variation of opinion among operators that we find authorities divided into two camps—those who prefer removal of the uterus and those who advocate its preservation.

Not only is there fundamental disagreement, but there are to be found among writers many complaints as to the frequency of failure or of recurrence following surgical treatment. Under these circumstances it seemed to me that by taking thought, we might at least determine on some general principles pertaining to the operation, which would be logically and mechanically satisfactory.

Working along these lines I felt justified in offering several conclusions bearing on the operation for prolapse. The points that I have tried to make may be summed up as follows:

1. Removal of the uterus as a cure for prolapse is unnecessary and entails distinct disadvantages. For instance, should cystocele recur after complete removal of the uterus, the condition becomes practically incurable because there are no tissues conveniently at hand that we may make use of to support the bladder. On the other hand, if cystocele recurs in the presence of the uterus and its ligaments, the prognosis is good because the preserved tissues may be used in several ways to effect a cure.

2. The importance of cystocele complicating prolapse is often overlooked. Recurrence after operation is very common and most operators find that the bladder is more apt to cause trouble than the uterus. The reason is that the ordinary anterior colporrhaphy is not an efficient remedy. Severe cystocele or hernia of the bladder is due to destruction of the supporting fascia situated in the anterior vaginal wall. When destroyed, this fascia cannot be restored so as to give adequate support. It is necessary, therefore, to reenforce the anterior vaginal wall with a structure which takes the place of the destroyed fascia and which is strong enough to give the bladder firm support.

3. There are two easy ways of reinforcing the anterior vaginal wall, one by interposing the uterus between the vagina and the bladder, the other by removing the uterus and sewing the remaining broad and round ligaments together beneath the bladder after the fashion described by Goffe.

4. As preservation of the uterus has obvious advantages over hysterectomy, it follows that vaginofixation or interposition is the operation of choice.

* Read in the Section on Obstetrics and Gynecology of the American Medical Association, at its Sixty-Third Annual Session, held at Atlantic City, June, 1912.

1. Somers, G. B.: Uterovaginal Prolapse in Elderly Women, THE JOURNAL A. M. A., Dec. 9, 1911, p. 1883.

### TECHNIC

With these conclusions as a working basis I have made it a practice to treat all suitable cases of prolapse by interposition of the uterus. The general technic of this operation is well known and needs no description. My experience, however, shows that in applying the operation to the cure of prolapse several points require discussion. The chief difficulty lies in handling the cervix. The fundus is well cared for by being imbedded beneath the bladder, but unless special attention is paid to the cervix it has a tendency, through relaxation of the vaginal vault, through pressure from above or through insufficient support, to become flexed downward and thereby to imperil the success of the operation. These three causes must be cared for separately by three points in technic: (1) transposition of the cervix; (2) amputation of the cervix; (3) ligamentary support.

### TRANSPOSITION OF THE CERVIX

The relaxed condition of the vaginal walls requires removal of considerable redundant tissue so as to narrow the vaginal canal. This is best accomplished by removing a triangular strip both in front and behind the cervix (Fig. 1). The apex of the anterior strip should correspond to the tubercle of the vagina just beneath the urethra. The base should correspond to the width of the cervix at its attachment to the vaginal wall. The apex of the posterior strip should be the highest point in the vaginal vault and the base should correspond to that of the anterior strip.

The posterior portion of the denudation provides for a very important item in technic, viz., transposition of the cervix to a high point in order that it may be better supported. This is accomplished as one of the final steps of the operation by pushing the cervix into the angle of the posterior denudation previous to sewing up the anterior vaginal wall (Fig. 4).

### AMPUTATION OF THE CERVIX

A frequent accompaniment of prolapse is an elongated cervix. With a long and hypertrophied neck on which pressure may be exerted from above, failure is almost certain to follow the operation of vaginofixation, because the cervix becomes flexed, acts like a wedge and tends to force its way down the vagina, dragging the body with it. To prevent this the cervix must be amputated to such an extent that there remains no portio vaginalis (Fig. 2). Amputation removes the wedge and also the shelf on which downward pressure may be exerted.

### SUPPORT OF THE STUMP AND VAGINAL VAULT

Not only should the cervix be shortened but also it should receive extra support in compensation for the loss sustained by the general relaxation of its supporting ligaments.

Reynolds, Hertzler, Dudley, Hirst and others propose to furnish the required support by uniting the base of the broad ligaments in front of the cervix. This method is excellent and rather easy of accomplishment. In the absence of a better method it is to be recommended, but the support is not in the direction desired and it is not restoring the original support. The broad ligaments support from the lateral pelvic walls. The sacro-uterine ligaments support from behind and above, and furthermore, furnished the original support. If their function could be restored we should obtain exactly what is desired, viz., a lifting of the cervix upward and backward.

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### SACRO-UTERINE LIGAMENTS

Much has been said and written about the utilization of these ligaments for correcting displacements of the uterus, but the methods proposed have been impracticable or too difficult for general adoption. It remained for Jellett of Dublin to show a surprisingly easy method of dealing with these ligaments and of demonstrating that they are large enough and accessible enough to be made use of whenever their support is needed.

Through the denudation posterior to the cervix, the sacro-uterine ligaments are readily exposed, felt and otherwise examined (Fig. 2). They are easily isolated, may be cut away from their attachments to the cervix (Fig. 3) and reattached to any point desired. In the operation under consideration the best place to fasten them is in front of the amputated cervix (Fig. 4).

This procedure not only furnishes the desired support but is practically a restoration of the normal support.

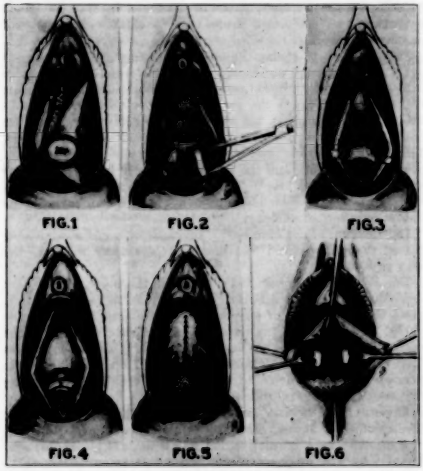


Fig. 1.—Removal of triangular strips both in front and behind the cervix to narrow the vaginal canal.
Fig. 2.—Amputation of cervix and exposure of the sacro-uterine ligaments.
Fig. 3.—The sacro-uterine ligaments cut away from their attachments to the cervix.
Fig. 4.—The sacro-uterine ligaments fastened in front of the amputated cervix.
Fig. 5.—Interposition of uterus completed.
Fig. 6.—Exposure of the levator ani by vulsella.

To my mind, utilization of the sacro-uterine ligaments in this manner marks the most important recent advance in the technic of the operation for prolapse.

### THE PERINEUM

The one step in operations for prolapse on which all authorities agree is that the perineum must be restored. To me it seems that the object should be functional restoration. In other words, an attempt should be made to repair the levator ani so that it will resume its function of keeping the vagina closed and the vaginal walls in contact. To ensure restoration of this function it is necessary actually to expose the edges of the levator so that they may be directly and strongly united.

As a point in technic I wish to call attention to the ease with which the edges of the levator may be fished out with the volsella. After denudation the edges of the muscle may be grasped between the index-finger and thumb. With this assistance a volsella may be deeply inserted into the muscle and the part plainly brought into view. With both sides thus exposed the levator is under perfect control and the separated edges may be directly, surely and securely united (Fig. 6).

### CONCLUSIONS

In conclusion I believe that a careful consideration of the conditions involved in the operation for prolapse of the uterus will lead to an acceptance of the following propositions:

1. It is better to preserve the uterus than to remove it.
2. The cystocele complicating prolapse of the uterus is most effectively treated by reenforcing the anterior vaginal wall.
3. Interposition or vaginofixation best answers the requirements of the operation.

In regard to the technic of interposition I believe that where the operation is applied to severe cases of prolapse, success depends largely on the following points:

1. Amputation of the portio vaginalis.
2. Transposition of the cervical stump high in the vault.
3. Support of the stump by shortened sacro-uterine ligaments.
4. Functional restoration of the perineum.

Lane Hospital.

### ABSTRACT OF DISCUSSION

DR. J. H. CARSTENS, Detroit: Do you think it reasonable that a broad ligament that has been stretched out 2 or 4 inches and a round ligament that has been stretched out as thin as a hair would ever get their function and hold anything of the uterus that you save? I try not to be a hobbyist. I try to work according to each particular case. If a woman is young and anxious to have children—or no matter how old she is if she still menstruates and wants children—I am willing to stretch any kind of a point to save that uterus. But if the poor old woman is past 65 and has ceased to menstruate for twenty years and if she has a uterus hanging 3 or 4 inches out of the vagina with a cervix three times as large as the body of the uterus, with everything stretched out, why should I do a kind of complicated operation which takes a long time and is just as dangerous, and amputate the cervix in order to preserve the little piece of the fundus of the uterus, and then do all these operations, I can't see. That uterus is absolutely no good and the best thing to do usually is to take it out. Now I don't do that always either. Occasionally a patient has some abdominal trouble. Perhaps she has symptoms of inflammation of the appendages or symptoms of gall-bladder disease, and I want to open the abdomen and explore it. Then I pull that uterus up, attach it to the external incision and make a ventral fixation. Ordinarily when the uterus is removed, the broad ligaments are too long; I take them and fold them across each other, double them up and stitch them across. I lift up the bladder so that it comes up and that holds the uterus. It is a simple operation and not very dangerous. There are various ways of doing it. I think that Dr. Somers' is one of the most complicated methods and that it is indicated only in cases in which the woman has a chance and is anxious to have children.

DR. J. WESLEY BOVÉE, Washington, D. C.: I too believe that the simpler methods as a rule are the better. There may be cases in which the interposition of the uterus between the vagina and bladder is indicated, and in young women we will try to save the reproductive organs.

DR. C. L. HALL, Kansas City, Mo.: Would Dr. Bovée do an operation such as has been described on a woman who is likely to have children?

DR. J. W. BOVÉE, Washington, D. C.: No, but in those advanced cases in which there is not too great contra-indication of closure of the vagina my procedure is removal of the uterus making the pelvic structures of the woman resemble as nearly as possible those of the male. That is, I would build up the perineum as much as is necessary and do a Lefore operation, closure of the vagina. Getting rid of the uterus is not necessary but we should be sure to do a Lefore operation to avoid the risk of having malignant disease of the uterus occur later without being discovered as we might have if the uterus were buried behind a closed vagina. I do not believe it is wise to have a uterus turned over as in this case with the cavity of it drawn up. I would split the uterus and take out all the mucosa.

The medical profession is going to realize that there is some merit in the uterosacral ligaments. For twelve years I have contended that the uterosacral ligaments have some use in their own natural function and can be used for building up the fascia of the pelvis.

DR. CHARLES O. THIENHAUS, Milwaukee: About six years ago I had a paper before the Section on this subject. I should like to ask those who do double hysterectomy what they do if the bladder hangs down.

DR. H. J. BOLDT, New York: There is no one operation applicable to all cases of procidentia uteri or there would not be so many kinds. Every operation described undoubtedly has its field. There are conditions in which we have the large uterus instead of the small one in women past the menopause. When the uterus comes down when a large wedge is taken out we will have a delivery because the intra-abdominal pressure will push open that uterus and push it out with the vulva and cause many more symptoms than the patient ever suffered before. I have seen six such cases. Unfortunately, I have had opportunity to reoperate in only one. We must bear in mind that it is not necessary to make such a large incision and that if we take out a piece of the uterus we will get good results. In the class of cases with complete procidentia past the time of use for the genital tract there is no better operation than that done by Dr. Bovée.

DR. ROSALIE SLAUGHTER MORTON, New York: I am perfectly convinced that Dr. Goffe's is a very valuable operation because it is the most thoroughly physiologic reconstruction of the condition of the pelvis. The suspension of the organs is a great deal more nearly normal than by any other operation I have seen. If we can suspend from above any organ it is better than to keep it up from below and it is more apt to remain in that position. The broad ligament is not drawn down. It is drawn across the pelvis and kept in its normal position. It simply goes across the pelvis and helps to support the intestines, and then if the uterus has been removed the bladder is fastened up in such a manner that cystocele cannot recur.

So far as leaving in a portion of the uterus is concerned—although the paper refers only to the operation in women past the menopause—it is not scientific because the nutrition of the remaining part of the uterus is very much interfered with. If the ovarian artery is ligated you leave some tissue in an unnatural position without proper nutrition. If you do not ligate the artery you leave tissue in an unnatural position liable to congestion because you have oversupply of blood. The stretching of the ligaments, drawing down the uterus to put it behind the bladder, has a tendency to leave the rest of the abdominal contents without support, and so the intestines are more likely to come down. Speaking of the elongated cervix, if there is any amputation, why not amputate the whole uterus? It takes no longer, the patient is permanently relieved and the operation is simpler. In one of the discussions this afternoon Dr. Noble dwelt on the normal tonicity of the tissues, and this might apply to the nerve tone of the pelvic tissues. We cannot expect the broad ligament which has been overstretched for so long a time to recover its tone sufficiently to contract to the normal. The excess must be removed.

DR. CHESTER M. ECHOLS, Milwaukee: The most difficult cases I have had to treat are those in which somebody has done a hysterectomy and the patients have come back for a cystocele, which is very difficult to treat. I have been in the habit for the past twenty years of making use of the fundus to hold the bladder back behind the symphysis pubis. The only criticism I could make on the operation without studying it further is that it involves too much operating, and so long as the simpler technic gives good results I shall continue to use it.

DR. J. RIDDLE GOFFE: While Dr. Somers has attempted to explain my operation he has not the first conception of it. I do not think he has ever seen me do it or has seen a patient operated on. My idea is a constructive one for retaining the plane of the uterus. When it comes to the extreme cases in old women I take the uterus out, but when I take it out I stitch together the broad ligaments to restore that plane of tissue again. Dr. Somers said that I bring the broad ligament under the bladder; I restore the uterosacral and the round ligaments. I stitch up the bladder and restore the plane of tissue as a deflecting plane. If it is an old case I take the tissue out and restore the plane by stitching together the round ligaments and on that stitch up the bladder, endeavoring to reconstruct that plane of tissue. I spread the bladder out in front and stitch it up so that the trigon is as it was before. Of twenty-eight patients examined in May on whom operation was performed from two to eight years ago, not one had cystocele.

DR. CHARLES P. NOBLE, Philadelphia: How does Dr. Somers get the uterosacral ligaments around in front? I am fully in accord with the general principles enunciated by Dr. Somers. He, however, explains his good results erroneously. We talk about these ligaments supporting the structures. They are merely guy-ropes and the intra-abdominal structures float. The intra-abdominal structures rest on pneumatic cushions provided by Nature and the guy-ropes merely help. The whole matter is a steady loss of energy. You can study it in protozoa. It is the law of devolution, not a question of medicine but a question of biology.

DR. COTTER (?), Columbus: In cases of women who have passed the menopause I find that a colporrhaphy will give the best results.

DR. W. O. HENRY, Omaha: I think the operation is very ingenious but rather difficult. I think that in many of these cases because of lack of support in the perineum the bladder is pulled down, causing a cystocele or rectocele. I repair the vagina and perineum, giving good support, and then unless there is good reason to remove the cervix I open the abdomen, remove the uterus down to about the internal os, then bring the broad ligaments together from the side, the posterior ligaments from behind and fix them in the stump, making a support from above. The uterus and bladder are supported in a measure by a normal vagina and a normal perineum; and further, by the ligaments from above. It is our business to make these supports as nearly normal as possible. We get good results in that way.

DR. WALTER B. CHASE, Brooklyn: The case of the woman past the menopause with small uterus which is displaced downward sufficiently to give discomfort and with it cystocele has not received proper attention. It seems to me that there is a simple method of operation in which the end-results are satisfactory. In a case of cystocele which is not too large and not associated with much inflammation of the bladder wall I have found that if the cervix is exceedingly long it is well to amputate it. We all recognize the fact that the bladder and uterus are interdependent. Where the uterus is not large, be sure that it is movable and the bladder not adherent. Make an abdominal incision, bring the uterus up, bring it forward into the abdominal cavity, remove a portion of the fundus so that you have a raw surface, stitch the peritoneal surface of the uterus to the abdominal wall. You then have the uterus and bladder both held up. Then you know just how much you have to do to overcome the cystocele.

DR. GEORGE B. SOMERS, San Francisco: The operation as proposed is at least interesting. More points have been raised than I can answer. My whole object is to devise a means of preventing the recurrence of cystocele after operation for prolapse, and I have taken it up from a mechanical, and as I thought, from a logical standpoint. The utero-

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sacral ligaments are not brought over the broad ligaments. They are easily exposed. You may put your instruments under them. The transfer is beneath the broad ligaments. Dr. Goffe asked me whether I expose the sacral ligaments. The ligaments are exposed, the cervix transposed to the upper part of the denudation and the ligament attached in front. The operation is easy to do. I want it plainly understood that this method applies only to severe cases of uterovaginal prolapse in elderly women, beyond the menopause, in whom the relaxation of the tissues has taken place.

Dr. Morton in criticizing the operation called attention to the fact that Dr. Goffe suspends, attaches or supports the bladder from above. I wish to dwell on the point that it is the anterior vaginal wall which must be reenforced and according to Dr. Goffe's description, he reenforces the anterior wall by bringing the round ligaments underneath and adds the abdominal supports to the bladder. The other attachments which he makes above to the perineum are not so important as his use of the round ligaments.

## SORE THROAT AND MILK-SUPPLY

### ABSTRACT OF DISCUSSION

ON PAPERS OF DRS. CAPPS AND MILLER AND DAVIS

*(Which appeared in The Journal June 15, 1912, pages 1848 and 1852)*

DR. ROBERT BRUCE PREBLE, Chicago: It very quickly became obvious in Chicago that while the disease very closely resembled the ordinary sore throats yet the clinical picture was not familiar. One of the most striking features in the clinical picture of these cases of sore throat, markedly in contrast with what one usually finds in ordinary streptococcus infections, was the slow pulse. In many cases there was not relatively but absolutely a bradycardia; patients with temperature ranging about 102 F. would have a pulse of 40 or even lower. There were patients also with extreme sore throats and a pulse about 90 and yet temperatures of even 104 or 105; even with such temperatures the pulse was frequently found to be as low as 80. This was quite important when one thought of the striking excursions that occurred in ordinary streptococcus infection; this was by no means a relative but an absolute and positive bradycardia. In the ordinary streptococcus infection there was more likely to be a tachycardia rather than a bradycardia. The picture presented by these cases I have not seen occurring except possibly in cases of typhoid; this disease had frequently associated with it a relative degree of bradycardia. Another peculiar feature of this disease in Chicago was the prolonged course, running sometimes for many weeks, even four and five months, and yet the patients suffered so little from anemia. It seems strange that such a disease would continue over such a long period of time, often with many complications, without developing very much hemolysis, and this was again in marked contrast with what occurred in ordinary streptococcic infections, or affections in which there were arthritis infections or complications. Hemolysis was not one of the prominent features in these cases and many went on without clinical evidences of hemolysis.

In spite of the large number of cases seen there were practically no cases of jaundice; possibly only two or three had been observed. In ordinary streptococcus infection, the one of ordinary type, jaundice early develops. All the views so far expressed regarding the type of disease epidemic in Chicago speak against the causative organism being the ordinary type of streptococcus. Against its being a pneumococcus infection is the fact, for example, that in pneumococcus infections one sees many skin conditions which could be called herpetic eruption, but in practically all the cases seen in Chicago there was only one case in which a herpetic eruption developed, although other eruptions were quite common, such as erythemas, diffuse scarlatiniform eruptions, erythema nodosum, erysipelatous eruptions and others from which a type of streptococci were obtained.

It seems as though there might be several organisms which occupied a position somewhere between the ordinary streptococcus and the pneumococcus and which might be a cause of this infection. They had produced by them features which were somewhat alike clinically and it was a question whether they were more like what was produced by the ordinary streptococcus or the pneumococcus. At any rate the clinical picture presented by these cases was different, giving practically a new clinical picture so far as my experience goes.

DR. LOUIS P. HAMBURGER, Baltimore: All my thunder has been stolen, for clinically and otherwise, what has been stated and certainly with what Dr. Davis has said, can apply to the Baltimore epidemic of so-called septic sore throats which prevailed in February and during the first half of March. During the latter half of February there occurred a very large number of enlarged cervical glands, or, as I called them, bubos. These patients did very well. There were some, however, that were severely affected. During the first week of the disease some developed enormous swellings; when bilateral the situation suggested that one was dealing with a case of Hodgkin's disease. It seems strange that such large swellings did not suppurate; they went down. One, however, did suppurate. The pus was evacuated and the same streptococcus as described by Dr. Rosenow of Chicago was found.

The course of the disease was, in many instances, prolonged for weeks. One child, aged 23 months, went nearly seven weeks with fever and with a sore throat which was not more than one saw in a case of ordinary follicular tonsillitis. These patients, as a rule, were out in from three to five days.

It seems strange that these septic sore throats could be disseminated in such a short time and I thought that it must be due to a universal carrier of the disease. In Baltimore it was not in fact a school epidemic. In my neighborhood, if an epidemic of measles, for instance, broke out, I knew what school to go to. But these cases occurred in little children under the school age. I began an investigation of the milk-supply. During three or four weeks in February we saw most of the cases. Thirty-five households were asked regarding their milk-supply; twenty-three took milk from what we term here X-Y-Z. M delivered milk from the largest dairy. We learned that there were in fact thirty-seven households supplied from X-Y-Z. These sore throats occurred during February and March. In thirty-three households there were ninety cases. There were thirty-seven households that did not take milk from the X-Y-Z dairy but from the M dairy, which was the largest. Among these thirty-seven only six cases of the disease occurred in six households. But an enormous number of cases occurred among the families supplied by the X-Y-Z dairy. Altogether there were sixteen deaths. (It was estimated that there were ninety odd cases in thirty odd households in Baltimore, and altogether probably between two and three thousand cases in the city.) There were, as I just stated, sixteen deaths, and fourteen of these patients took milk from the X-Y-Z dairy. Nine of these sixteen deaths resulted from peritonitis. As in the Chicago epidemic, the milk from a suspicious dairy was subjected to a temperature of 160 degrees for three minutes. It transpired that the pasteurizing plant broke down; but it was cold weather and it was believed that the milk could be sent out unpasteurized. This was found to be a mistake. As to the origin of the infection, whether human or bovine, we are not certain. We believe that it is milk-borne if not milk-bred.

DR. HOWARD S. ANDERS, Philadelphia: In February and March of this year, in Philadelphia, there occurred an epidemic which was clinically similar to the one described. During February, March and April, and probably long before, we realized that we were dealing with an unusual infection of the streptococcus sore throat. As in the cases described, there was the sore throat, marked enlargement of the cervical glands, a disease which might be called "acute epidemic streptococcus adenitis."

As Dr. Preble has stated, there was another picture, a relative bradycardia associated with some irregularity in the heart's action in many cases. The temperature was acute, but short-lived. Most of these cases occurred among children between 3 and 5 years of age. They ran a temperature of

from 103.2 to even 106 and then there occurred a rapid decline. Some of the cases started as follicular tonsillitis, or influenza, but there was no exudate on the tonsil. There were muscular aching pains, but the rapid decline of the temperature was significant. With this decline in the temperature there soon appeared a marked swelling of the glands near the angle of the jaw. This varied in size from a walnut to a pear. It was so marked that it made one believe that there was present a malignant case of diphtheria and, in many of these cases, the physician in attendance would have antitoxin ready to administer. But the subsequent course of the disease showed that he was wrong in his diagnosis.

Some of these cases started with appearances of an infection, with coryza, cough, and so forth, and appearances of an occurrence of a streptococcus infection. In one instance the milk producers were very careful to have clean cows; the milk must have been clean because of the methods employed. But there occurred cases of virulent sore throat. The man who milked the cows was ill with sore throat, but kept at his work. Five days after his sore throat one of the children in his household was taken sick and this was another instance of an epidemic of septic sore throat. An interesting question arose, is this peculiar disease due to a distinct or specific streptococcus or to some organism which produces other diseases as well? Is it bovine or human in origin? I am inclined to believe that it is human in origin. The milk that was infected was infected by the milkman. The infection did not appear to be from the ordinary streptococcus pus and whether it was from erysipelas microorganisms I do not know. It appears to me that too many particles of dust were allowed to get into the milk-cans and too many were about the cow-barns. With proper care much could be done to keep down this streptococcus infection.

DR. JOSIAH N. HALL, Denver: Thirty years ago we had an epidemic of sore throat of the same type as described by the readers of the papers. This epidemic occurred in ten of our smaller cities and was characterized by abscesses appearing in the groin and under the arm and the streptococcus was found in these instances. During that winter alone there were many cases of multiple abscesses and some cases of a mild pyemia. Thirteen abscesses were opened, the pus examined and in all were found streptococci. These abscesses occurred very frequently and always the streptococci were found in the pus. No deaths occurred. The glands were very much enlarged but they did not suppurate, which was quite a contrast with what was usually found in ordinary streptococcic infections.

DR. E. C. ROSENOW, Chicago: It seems to me that this is a demonstration that almost any milk can be looked on as a carrier of such an epidemic. There is one general factor that stands out: bacteriologists rarely isolate these virulent streptococci; in order to show that the milk is virulently infected with the streptococci they use separators or clarifiers; they obtain slimes mixed with bacteria and in them are chiefly streptococci. When injected into rabbits or mice evidence of their virulency was obtained in twelve out of fourteen samples taken within a radius of 1,400 miles. Recently I have found with Dr. Davis table-milk that had been pasteurized and which gave beautiful results; also a sample of cream, as well as a sample of butter. I also attempted to obtain milk in a sterile manner from the cow—a milk that was without any bacteria. In one cow out of fourteen I found virulent streptococci, and yet with no evidence of disease of the udder. I found two instances of mastitis.

With regard to Dr. Hamburger's statement about the disease being milk-borne and not milk-bred, I am not quite sure but that it might be both. In regard to what was stated about mastitis in cows being the source of these epidemics, it should be remembered that there were in fact two sources of the streptococci. The chief original source was the throat of the individual; the farmer milked into a pail held between his knees into which he coughed, and this was without doubt a frequent source of the infection. The ordinary streptococci found in the throat could take on features which made them virulent, causing a virulent streptococcic sore throat.

DR. W. W. TOMPKINS, Charleston, W. Va.: Are all these cases reported here the same or are we dealing with a variety of diseases? Is there the same diagnosis of the cases as they occurred in Boston, in Philadelphia, in Chicago and in other places? Are not one and all alike? Two individuals laid more stress on one symptom only than on another. A similar condition of affairs is found in dealing with cases of typhoid as they occur from year to year; in one year there may be many perforations of the intestines reported; the year following very few; yet this is the same disease. It cannot be said that the disease one year was a different disease from that the next year; it was still typhoid. I should like to know just how the cases in these epidemics of sore throat were designated and on what the diagnosis was made; whether there was a tonsillitis, a mixed infection, or something else.

DR. WILDER TILESTON, New Haven, Conn.: A milk epidemic has been recognized in England but not on the continent. In Boston occurred the first epidemic of the so-called sore throat in this country. We all know that the disease described by Pfeiffer is characterized by sore throat, enlarged glands or lymph-nodes, and so forth.

DR. J. A. CAPPS, Chicago: In regard to the question about different streptococci being the cause of the different epidemics in various cities, it is very difficult to differentiate these epidemics of sore throat which occur in different parts of the country; it seems, however, that they are the result of one definite cause. Comparing the disease as it occurs in different cities there is noted quite a resemblance. The epidemic that occurred in Boston was thoroughly worked up and it was so described that it showed to be very much like ours. The clinical manifestations, especially those that occurred during childhood, were strikingly similar to what we found. One feature in the Boston epidemic was quite remarkable; the statement was made that so many patients were infected through the milk directly, and that the number of secondary cases was small, whereas the teaching had always been that the infection of streptococcic sore throat was readily and easily carried by direct contact and even by proximity. This fact was strongly brought out in the papers. Among ten cases of so-called secondary sore throat, there was only one that could be really traced. I am surprised that 85 per cent. of the cases could be traced to the milk-supply and 15 per cent. could not be so traced.

A physician in Chicago took care of a patient with a type of sore throat which was clinically the same as here described. While being examined the patient coughed in his face and mouth. The physician went home and told his wife that, as a result of this occurrence, he expected to have a sore throat. In thirty-four hours he had a chill, a sore throat, glandular enlargement, a nephritis, and was ill for several weeks. It seems remarkable that so few cases appear to be secondary, and so many primary.

In a discussion in Boston much was said about the normal run of cases of tonsillitis and the question arose how to differentiate these cases of ordinary tonsillitis from these cases of septic sore throat. One hundred and seventy-three cases were most carefully studied by smears and cultures and apparently they were of the epidemic type. But in a house-to-house investigation, all gone over carefully, many hundreds of households showed that no such investigation or distinction could be made with any degree of certainty. There was a certain definite number of people who used milk, for instance, from the X dairy which afforded more serious cases of septic sore throat and the complications than people who used milk from other sources. With regard to the number of people infected, in three districts only there were about 10,000 people infected.

I have no accurate way of determining the mortality rate; in all probability about 200 or 300 people died.

DR. JOSEPH L. MILLER, Chicago: Did all these people who were taken ill drink milk? There is no doubt but that there were a large number of people who were taken ill who did not drink milk at any time, but they did take cream and this is a possible source of infection. I presume also that the use of butter might be another source of infection. There is another thing to be taken into consideration in these cases

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of streptococci septic sore throat infections, and that is whether or not any particular epidemic belonged to any certain type; whether the large glands came after the appearance of the sore throat; whether there was a tendency for them to break down or suppurate, and so forth. Many of these cases in Chicago were looked on as cases of ordinary tonsillitis.

DR. DAVID J. DAVIS, Chicago: Through the kindness of one of the doctors at Harvard College I was enabled to obtain four strains of the streptococcus which was isolated during the Boston epidemic. These strains have been subjected to various tests. They all seem to be identical with the organism with which we had to deal in Chicago. In this epidemic occurring in Batavia there were many cases of mastitis occurring among cows and this appeared to be quite unique. This was detected by the farmers themselves and was to them quite a new experience, for many of them had never had such an experience before and were quite astounded. In a great many of these cases the mastoiditis preceded the outbreak of the epidemic sore throat and occurred among the owners of the herds who had sore throats. In some of the cases the disease did not appear to precede the mastoiditis. There was always great difficulty in getting accurate data, especially after two, three or four months had transpired since the epidemic. I see no reason to believe that the infection, the streptococcus, comes directly from the cows, although there is no reason to believe that the milk might not be subsequently infected by the workers.

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## INCOMPLETE ABDOMINAL SURGERY*

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DENVER

From Jan. 1, 1901, to Dec. 31, 1910, a period of ten years, 1,244 women were operated on in St. Mary's Hospital, Rochester, Minn. (C. H. and W. J. Mayo), for uterine myomas. Of these, ninety-two, or 7.1 per cent., had gall-stones.[1]

No single factor has served to discredit gynecologic and abdominal surgery during the past twenty years so much as has the failure to bring about symptomatic cures for our patients, though gross pathologic processes have often been found and eliminated at our operations. Frequent complaints from patients that they were worse or at least no better than before the operation have disheartened and discouraged both the patient and her friends, as well as the surgeon, and repeated operations have become necessary because the first was incomplete owing to a failure to find important associated abdominal disease.

Special and regional surgery in limited fields has been responsible for such results in most instances, the operation being based on a more or less specific diagnosis which may be quite correct as far as it goes, but which from the obscure and complicated nature of many of the cases does not, and often cannot, go far enough or be made exact enough in all details until the abdomen is opened.

In this way serious pelvic lesions, intestinal diverticula, enteroptoses, kinks, bands, hernias and diseases of the stomach, gall-bladder, pancreas or kidneys have been overlooked in the performance of operations for appendicitis through a small "gridiron" incision, and many similar oversights must be charged to pelvic surgery, even when seriously diseased pelvic organs have been properly dealt with. Indeed it is only within the last few years that the practice of making a systematic search for undiagnosed pathologic conditions of the abdominal viscera after the abdomen is opened has found favor, and even to-day it must be admitted that this practice, as a routine, is limited to a very small proportion of those who perform abdominal operations. This may not always be so much of a misfortune, however, as would at first appear, for many abdominal operators have come into existence during the last few years who are relatively safe in undertaking an appendectomy or hysterectomy and yet are not sufficiently experienced to deal successfully with gall-stones, gastric ulcer or an intestinal anastomosis, should the necessity for such an operation be found to exist. A living patient with overlooked gall-stones is after all better off than a dead one. Nor are we justified in saying that there is no field of usefulness for him whose limitations of experience and opportunity lead him to feel that he is confident and competent in limited areas only, for many occasions arise when such an operator may in an emergency make an exact diagnosis of a localized disease and deal with it successfully.

The principles of surgery in general and of abdominal surgery in particular are, however, now so established that everyone who performs abdominal operations of any kind should feel it his duty to equip himself to meet any intra-abdominal complication disclosed at the operation, and he should never close an abdomen, except in an emergency, without exploring by palpation or inspection all of the common points where coincident or correspondent pathology may be found.

Certain notable exceptions to this rule must of course be conceded to exist, as for example in operations for intestinal perforation, appendicitis or salpingitis where infection would be diffused, or in ectopic pregnancy with rupture or a cesarean section. In such cases definite diagnosis previous to operation is ordinarily possible, and the emergency is usually such that the particular trouble diagnosed should alone be considered at the operation.

For such general intra-abdominal exploration as this thesis contemplates large incisions are necessary, preferably in or near the median line, with supplementary incision over any previously undetected diseased areas that may be found and are not accessible through the original opening. The hand and arm must be introduced and swept about from point to point where associated disease might exist.

Dr. James E. Moore of Minneapolis says in reference to this subject: "The average surgeon is prone to do his abdominal work through too small an opening. He points with pride to an inch and a half scar after an appendectomy, and a two and a half inch scar after an operation for the relief of pathologic conditions in the pelvis. . . . It would be very discomfiting to us if we could fully realize how often we have left unrecognized pathologic conditions because our opening was too small to admit of a proper examination, and because we had not acquired the habit of making a thorough examination of the whole abdominal contents in every instance."[2]

We now know that many of these intra-abdominal diseases are intimately or remotely associated. That many of them are directly correlated has been demonstrated repeatedly. The occurrence of cholecystitis or cholelithiasis in women three times as often as in men is important, and the fact "that 90 per cent. of the women who have gall-stones have borne children, and that 90

* Read in the Section on Obstetrics and Gynecology of the American Medical Association, at its Sixty-Third Annual Session, held at Atlantic City, June, 1912.

1. Mayo, William J.: Innocent Gall-Stones a Myth, THE JOURNAL A. M. A., April 8, 1911, p. 1022.

2. Moore, James E.: A Plea for Larger Incisions and More Thorough Examinations in Abdominal Surgery, THE JOURNAL A. M. A., Sept. 16, 1911, p. 950.

per cent. of the women who have gall-stones and who have borne children identify the beginning of these symptoms of cholelithiasis with some particular pregnancy,"[1, 2] is of paramount importance to all those engaged in the practice of obstetrics, gynecology and abdominal surgery. The involvement of the appendix with diseases of the right tube and ovary, and of the right tube and ovary with the diseases of the appendix are so common that few abdominal surgeons operate for a disease of one of these organs without examining the other, and removing it if necessary. The coincident involvement of the kidney with diseases of the bladder and the implication of the stomach, liver and duodenum with various pathologic conditions in the lower abdomen and pelvis are well known. Even certain physiologic pelvic conditions give rise to profound stomach symptoms. Instances in which a gastro-enterostomy has been done for what ultimately proved to be the vomiting of pregnancy have been known. It is fair to assume that the operation was not done by an obstetrician or a gynecologist, but by an enthusiastic gastro-enterostomist.[4]

Tuberculosis, cancer, enteroptoses, stomach or intestinal perforations, volvulus and intussusception or other forms of intestinal obstruction, rupture of the uterus, bladder or vagina, diverticula, gall-stones, pancreatitis, etc., may accompany any other condition and complicate any abdominal operation one undertakes. Some of these lesions are correlated, and if incomplete and unsatisfactory results are to be avoided the surgeon must be prepared to deal successfully with any of them if he presumes to undertake the cure of one of them through an abdominal operation.

The point may be raised that exact and detailed diagnosis should be made previous to operation, and that an operation should not be undertaken until such a diagnosis is made; to anticipate this it becomes necessary to state that an exact and complete intra-abdominal diagnosis of all the possible complications previous to operation is, on the face of it, impossible even when an exact diagnosis as to one diseased viscus is easy.

In certain areas of the abdominal cavity, particularly if the disease be advanced, accurate differential diagnosis may never be made with any degree of certainty, even by those who have had the greatest clinical opportunities. This is particularly true of the upper right quadrant where the liver, gall-bladder and ducts, the stomach and duodenum, the pancreas and the right kidney are all so closely grouped. With their vast experience and exceptional opportunities for exact diagnosis in this region, the staff of St. Mary's Hospital, Rochester, Minn., frequently content themselves by telling patients that a "surgical condition" is presented and that an operation is necessary. Exact diagnosis is left to be made at the operation. Who, for example, can tell by external palpation, stomach analysis and the clinical history when a gastric or duodenal ulcer becomes carcinomatous, or exactly when an impacted gall-stone has ulcerated through into a circumscribed abscess or into the intestine, or, through pressure caused carcinoma or pancreatitis? Who can differentiate when all of these structures are matted together in a common mass of adhesions with symptoms pointing to all of the involved organs and characteristic of none alone?

The salient points of the histories of two illustrative cases furnish examples.

3. Branson, Laura H.: Cholecystitis and Cholelithiasis in Their Relations to Pregnancy, THE JOURNAL A. M. A., Nov. 18, 1911, p. 1690.

4. This word is coined to describe a type of modern surgical enthusiast.—H. G. W.

CASE 1.—A female patient of Dr. G. W. Holden at the Agnes Memorial Sanatorium for Consumptives, the wife of a physician, was taken suddenly and seriously ill with abdominal pain, vomiting, rise of temperature, markedly increased pulse rate, etc.

A provisional diagnosis of appendicitis was made by the house officer and confirmed by me after examination. I found a distended, painful and rigid abdominal wall, with marked rigidity and localized tenderness midway between the umbilicus and the anterior superior spine of the right ilium. I discovered that she also had a uterine retrodisplacement. Following my customary practice in such operations on women, a long median incision was made below the umbilicus, through which a comparatively innocent-looking appendix was examined and removed, and the retrodisplaced uterus corrected. Careful detailed exploration through the incision had, however, previously determined that an enormously distended and tense gall-bladder containing several large stones extended so low in the abdomen that its tip was well below the umbilicus, almost to McBurney's point. It could easily be seen through the low median incision. The first incision was closed and a second made over the base of the gall-bladder, the sac was aspirated, the stones were removed (one being impacted in the "pelvis" of the gall-bladder) and the wound was closed with the usual drain in position. The patient made a prompt and *complete* recovery, which, of course, she could not have done had the usual small incision for appendicitis been employed and the coincident injection of that organ been accepted as the sole cause of the symptoms. No thorough examination would have been possible through such an incision, and the gall-bladder, distended to the bursting point with a turbid mucopurulent fluid, must have escaped detection.

CASE 2.—A woman who had been under treatment for gastric ulcer for many years by some of the best internists in the country, had during this time a number of hemorrhages of the stomach. She was brought to me for an operation for piles attributed to a prolonged milk diet. Examining her I found an irritable anal ulcer (fissure) and some small hemorrhoids, a retrodisplaced bound-down uterus, and a chronic appendicitis. The latter diagnosis was confirmed by a report from Dr. J. N. Hall, who once saw her in an acute attack of appendicitis.

She at first refused operation except for the rectal condition, but finally consented to have the uterine retrodisplacement corrected and the appendix removed. On the morning of the operation, however, she gave her consent to an exploration of the upper abdomen through the incision and requested that we deal with any diseased condition found.

The bound-down retrodisplaced uterus was freed and replaced, and an old, scarred veteran of an appendix wrapped in adhesions was removed. No kinks or other intestinal complications were discovered, and a perfectly normal stomach and duodenum presented themselves. The gall-bladder was filled with large stones, however, and these were removed in the usual way through another incision. The fissure and hemorrhoids were then taken care of and the patient returned to her bed, to make a prompt and also a *complete* recovery. Had she failed to agree to the exploration and operation in the upper abdomen, she would probably have remained a victim of "gastric ulcer" all her life without relief, inasmuch as the true cause of her stomach symptoms (the gall stones) had never been discovered.

This case illustrates the complex character of many of these intra-abdominal diseases, and demonstrates the folly of dealing with one or two diseased organs and leaving others which are quite important as factors to keep the patient ill or in pain.

Regional abdominal surgery in limited fields has had its day. He who aspires to do abdominal surgery to-day must fit himself to do any and every operation within the abdomen that a systematic operative exploration shows to be necessary, and when he has finished with his work it must not be incomplete.

310 Metropolitan Building.

## ABSTRACT OF DISCUSSION

DR. J. C. BLOODGOOD, Baltimore: Historically it is rather interesting to look back on the narrowness of our ambition in the field of abdominal surgery. For many years, in operating on the appendix the surgeon saw little but the appendix. He

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failed to see conditions of the cecum and of the pelvic organs. In the development of surgery of gall-stones, the literature shows that for a great number of years while we were removing gall-stones from the bladder and common duct, draining the gall-bladder, we rarely if ever made a note in regard to the pancreas. Of course, to-day we are given an opportunity to operate at an earlier period of the disease so that the pathologic changes are less extensive; they do not hold our entire attention or require our entire efforts to cure them, so that there is opportunity without increasing the risk of the patient, to allow the surgeon to look for other lesions. You open the abdomen in appendicitis and find peritonitis or abscess or gangrene of the appendix. You are unable or you will be unwilling to investigate further because it will require all your art to cure that lesion; but when you explore early in the acute stage of appendicitis, or open the abdomen between the attacks, for vague abdominal symptoms, you must be prepared not to be satisfied with the exploration of the region of the appendix only, but to look for other conditions. We should not only enlarge our field of vision during the operation, but we should be very careful to enlarge our investigation before the operation. There are two types of abdominal lesion: one in which the symptoms are so acute that time is the most important element, as in perforations with hernia, cystocele, acute inflammatory lesions of the appendix and pelvis, attacks of gall-stones of such severity that you fear pancreatitis, symptoms suggesting intestinal obstruction. Here there is no opportunity for a long investigation; the life of the patient depends on early intervention and there we must be content with relief of the one predominant lesion; but to-day we more often see patients in the subacute and chronic period and I am inclined to think that now and then in the hurry of our surgical work we subject these patients to operation before making a very careful investigation. I would urge therefore that the investigation in the chronic group or the group in which the symptoms are subacute or chronic should be much more extended. It requires time and on the whole it is more expensive, but you will be surprised what you ascertain by spending a little longer time in taking the history. Often in those cases in which our records say there are no symptoms, a more careful history brings out a pretty definite symptomatology.

DR. JAMES E. MOORE, Memphis: No matter how expert we may be in diagnosis and study of our cases before operation, every abdominal operation is in a measure an exploratory one. Dr. Wetherill flatters me by quoting from a paper which I was led to write through my own mistakes. I felt honestly that my gray hairs and my long experience in surgery put me in a position that I could afford to state publicly that I had made mistakes so that younger men might benefit by my misfortunes. I can remember some patients who came back to me after I had done what I considered brilliant surgery and I was still more chagrined when they went to other surgeons who reoperated and found that I had failed to recognize important intra-abdominal conditions at my first operation because I had not established the practice of systematically examining the whole abdominal cavity when I opened the abdomen. I feel that we owe it to our patients that when once we have made an abdominal operation we should sweep the hand over every corner and examine every organ that is particularly liable to be infected. If the patient's condition is such as to permit it, these conditions should be relieved at once. If this cannot be done we at least know what we may be called on to do later and we can give the patient the benefit of it.

DR. C. LESTER HALL, Kansas City, Mo.: Not long ago I was asked to do an emergency operation on the wife of a physician in my own city. The case was one of twisted pedicle of an ovarian tumor. Operation was not permitted until the patient was in collapse. I removed the tumor, which was very easy, and then, as was my habit, I swept my hand around the abdomen. I found a gall-bladder full of gall-stones. As the patient was in no condition for a prolonged operation, no attempt was made to remove the stones. The patient recovered after a stormy convalescence, but we were in position then to operate later, knowing definitely of the presence of gall-stones. Now that just emphasizes that if these patients are in critical conditions, it is justifiable except in cases of infection to explore the abdomen and make diagnosis; the doctor is then in position to know what he may be called on to do later. I think that is one of the most important points, even if the patient is not in condition to have the operation continued five or ten minutes longer. The time is well spent if we investigate the abdomen and know what we may be called on to do at another time.

DR. WALTER B. CHASE, Brooklyn: We often find conditions which we do not anticipate and it is a question whether we have the legal right to go on and do what ought to be done. We have found that it is well to ask the consent of the patient before operation to do what surgical common sense dictates should be done.

DR. HUGO O. PANTZER, Indianapolis: The opprobrium resting on modern surgery is that it ministers too much to the emergency phase of disease. Patients come to us when they are very sick and our attention is drawn to that acute phase. The time must be when medicine is preventive more than curative. When our patients come to us we ought to make careful search for disease and thus avoid unnecessary operation.

DR. THOMAS S. CULLEN, Baltimore: As Dr. Bloodgood says, we should be more careful in the taking of our histories. There are, however, many instances in which it is absolutely impossible to make diagnosis before operation. The economic side of this subject is important. If I am doing pelvic surgery and find something, in addition to pelvic disorder, requiring an operation in the upper abdomen which I am not capable of performing, I must close the abdomen and turn the patient over to some one capable of looking after the condition in the upper abdomen. That entails two operations which means a double length of time for the patient in the hospital, double risk, twice the expense and two operators' fees. The time is coming when this will resolve itself into an economic problem and one which, if we do not settle for ourselves, the public will settle. I feel that any man who does pelvic work should be able to undertake anything in the upper abdomen. There is no doubt that the most difficult operation in abdominal surgery is the complete Wertheim operation for carcinoma of the uterus, and that surgery in the upper abdomen on the average is child's play in comparison with the pelvic conditions that we frequently have to deal with. The obstetrician must be a good surgeon, but on the other hand we cannot tell when babies are going to come, cannot tell when we are going to be called out at night and as a result cannot always be in good condition to perform two or three abdominal operations the next day.

DR. C. A. L. REED, Cincinnati: The point just made is exceedingly important. In my teaching I have insisted on the matter of taking histories, that the specialist owes it first to his patient and next to himself that the particulars in reference to his own specialty shall be noted. In other words, my record-blanks are so drawn that they give the general survey of the case and the probable conditions within the abdominal cavity. The idea that any surgeon could restrict himself to one-half of a cavity and to the organs within it is specialism run mad. The man who on entering the abdominal cavity finds himself incompetent to deal with anything he might find in that cavity ought not to be in practice. I believe therefore that the point has been well taken that all these conditions should be brought under survey and dealt with at the same time, if this is consistent with the general welfare of the patient.

On the other hand, there is something to be said with regard to the endeavor to complete the operation when the interest of the patient is thereby jeopardized. It is just as important to know when to quit as to know when to begin. Obviously a surgeon is recreant to his duty if he leaves an operation incomplete or continues to the jeopardy of the patient on meeting an unexpected condition. Every surgeon should go in with the assurance that he is to attend to all conditions which in his judgment are essential to the welfare of the patient.

DR. J. S. WEBER, Davenport, Ia.: A thought that should be particularly emphasized is that conservative surgery means complete surgery. I think we ought to have a better understanding between our patients and ourselves. I have in my

own hospital for the past two years had typewritten blanks in which I have both the patient and the husband give me the permission to do what in my judgment is the best for the patient.

DR. GEORGE ERETY SHOEMAKER, Philadelphia: Our permission should go one step further. For years I have had in my hospital a book with the blanks for giving permission to do what we find necessary. In this way we have these consents which go back for years, giving the surgeon permission to do that which arises in an emergency.

DR. HORACE G. WETHERILL, Denver: The surgical and gynecologic lines are readjusting themselves to present conditions and necessities. The time no longer exists when the ophthalmologist limits himself to the right eye or the front half of the eye. The time has come when these limitations must be wiped out. This is a critical time, in my judgment, for the Section on Obstetrics and Gynecology. It is most gratifying to find the unanimity of sentiment which endorses a very much wider scope as a field of usefulness for this Section.

## THE NATURE OF THE FILTERABLE AGENT CAUSING A SARCOMA OF THE FOWL*

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AND
JAMES B. MURPHY, M.D.
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Although the filterable viruses have but recently come to attention, it is known that they are of very diverse character and that, except as a matter of expediency, they can scarcely be discussed together. At present each constitutes a separate problem. This is especially true of the filterable agent which causes a sarcoma of the fowl.[1] The disease is so different from the ordinary infectious processes that nothing can be preassumed with regard to the character of the etiologic agent. On the contrary, in considering it one must take into account all those numerous and often bizarre possibilities which are suggested by the literature on tumor-causation.

The first question concerning the agent is whether it is living. A very little of it will give rise to a growth from which numerous others may be started, each yielding the agent in abundance. But this does not necessarily settle the point. The agent might very well be a chemical substance somewhat similar to those used experimentally to produce atypical cell-proliferation. The fact that the proliferation induced by a chemical compound ceases as the latter is expanded, whereas our sarcoma's growth is continuous, constitutes no objection. For the sarcoma cells may themselves be the source of the inciting chemical, and thus serve to perpetuate the disease. Such an assumption throws little light on the origin of the "spontaneous" tumor which by transplantation has yielded our material.

The most direct means of proving that the agent is alive is to grow and transfer it in culture. Recently we have done much work in this direction without success. The results of differential filtration may have some value as indicating whether the agent is a formed body and its probable size. Here our recent results confirm those first reported. In a dilute tumor extract the agent will pass through Berkefeld filters which hold back at the same filtration *Bacillus fluorescens liquefaciens*, an organism measuring 0.5 micron by 1.0 to 1.5 microns. On the other hand, Chamberland bougies (F) prove impermeable despite conditions which seem very favorable to passage. Could the findings be accepted at their face value, they would go to show that the agent is organized and perhaps even visible. But many factors serve to invalidate negative results with filters of fine texture. As is well known, these may hold back the complex proteins as well as living organisms. Nevertheless, in view of the findings, we have made repeated attempts to demonstrate the agent with special stains or the dark-field microscope, but to no purpose.

The conditions under which the agent can survive have much interest. As elsewhere stated, it may retain its activity in dried tissue for seven months, and for at least one month in tissue placed in 50 per cent. glycerin. In both instances it undergoes a gradual attenuation, as evidenced by the behavior of the tumors it engenders. These appear in relatively few hosts and after a long interval; they grow slowly and retrogress frequently. The process of repeated rapid freezing and thawing, which reduces the tumor tissue to a pulp, does not markedly lessen the activity of the associated agent. The latter's resistance to heat, on the other hand, is little greater than that of the tumor-tissue itself, as has been shown by parallel inoculations of bits of the same heated material into susceptible fowls and the plasmatic medium of Burrows. Tumor-tissue submitted to a heat of 50 C. (122 F.) for fifteen minutes fails absolutely of growth in the plasmatic medium, in which its proliferation is ordinarily very active; but when inoculated into susceptible fowls it often gives rise to tumors and may do so even when it has been heated at 53 C. (127.4 F.). Whether growth in the plasmatic medium is a real index of the tumor tissue's viability is uncertain. But that the filterable agent will withstand a temperature of 50 C. for fifteen minutes is shown by the production of tumors with tissue which has been dried, ground and suspended in Ringer's solution previous to heating. Material which has been heated to 55 C. (131 F.) for fifteen minutes never gives rise to the sarcoma.

In sarcomatous tissue autolyzing at the temperature of the chicken's body (41 C., 105.8 F.) the agent remains active for less than forty-eight hours. Toluol and chloroform in the proportions employed to prevent bacterial growth during autolysis destroy it in less than two hours. So, too, will 50 per cent. alcohol or 2 per cent. phenol (carbolic acid). Unlike the virus of poliomyelitis, the agent fails to withstand phenol 0.5 per cent. Like the animal organisms in distinction from most of the vegetable ones (von Prowacek) it is rapidly destroyed by bile, and by saponin in high dilutions. At 41 C. it is within two hours deprived of all activity by 50 per cent. rabbit bile or chicken bile, or by saponin in strengths greater than 1 to 800.

To obtain the foregoing data the only test employed, or at this time possible to employ in demonstrating the agent's activity, has been the inoculation of susceptible fowls. No single attribute among those determined suffices to show the nature of the agent; yet, taken together, its characters are those which we associate with microorganisms.

* From the Laboratories of the Rockefeller Institute for Medical Research.

1. Rous, Peyton: THE JOURNAL A. M. A., Jan. 21, 1911, p. 198.

**The Preservation and Restoration of Tendon Function.**—For the small tendons of the limbs, transplantation is frequently one of our best methods of restoring function, because the splitting and lengthening operations are frequently not desirable on account of the tendons being so small. Many times we can bridge in a gap in flexor or extensor tendons in the wrist, because some one of the group frequently is not destroyed. At other times by transplanting we can restore function to a tendon paralyzed because of destruction of nerve function.—W. L. Brown in *Texas State Jour. Med.*

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# A METHOD OF CONTINUOUS STERILIZATION OF INSTRUMENTS, TOGETHER WITH ASEPTIC HYPODERMIC MEDICATION

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It will be seen in the illustration that an attempt has been made to demonstrate, pictorially, a procedure whereby instruments and hypodermic medication may be rendered reasonably safe, convenient and prompt as concerns sterility, as well as designedly simple from a practical standpoint, particularly as relates to emergency room, minor surgery or similar work.

Briefly stated, the essential features are that little or no attention under this system need be paid to the matter of the mechanical or the chemical cleanliness of instruments after this sterilizer is in operation, with consequent relief of mind where one is without skilled help; that the annoyance of the sterilizing receptacle running dry or overflowing is avoided; that the applied agents mentioned are convenient for prompt use, and that the nearest tinsmith or plumber may readily construct a similar contrivance for those who may desire such innovations in their operating rooms, connected up with their present equipment.

The water used for hypodermic injection (sterile and hot) is withdrawn from the small metal well, shown in picture (*c*) into the barrel of sterile syringe, aided by the plunger, the tablet then being dropped into the water-filled barrel, and the needle removed from ring (*d*) on the side of the well by means of the hickory-wood pincers (*e*) that are kept immersed in a solution of liquor formaldehydi within the large test-tube, also shown in the view, the barrel being screwed on the needle-thread, while the latter is presented in a perpendicular manner by the wooden forceps grasping needle away from the nub, the same utensil later withdrawing the wire from the needle.

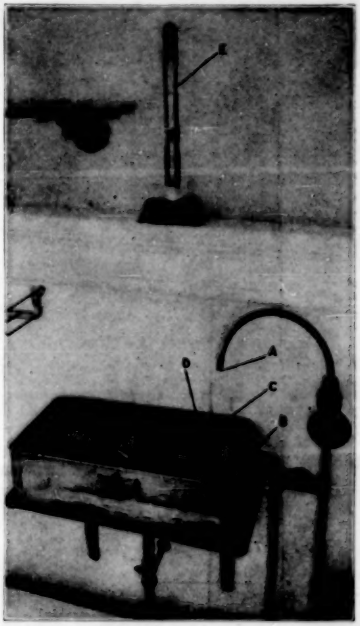
If an all-metal syringe is used the needle is simply adjusted over the end of syringe in the same manner, and clamped in place in the usual fashion by turning the plunger handle bars from above. Absolute alcohol, or full-strength tincture of iodin[1] is now applied to the surface of the skin about the size of a silver dollar to render the skin sterile, through which the needle is then passed at a point previously determined on, thus completing the procedure.

The water-inlet marked *a*, in starting up the sterilizer, is at first turned on full and the entire receptacle, inclusive of the well, allowed to fill up to a point indicated by *b*, or the water-pipe, which does not thus permit the sterilizer at any time to overflow, and which drains into an escape-pipe or pail placed on the floor, or connected with the house drain-pipe.

When this has been accomplished the water-inlet pipe *a* is now allowed to drip constantly into the small metal well *c*, from which it escapes or "slops over" down its circular walls into the sterilizer proper, and in that manner going to supply the water lost by evaporation in the form of steam, and which of course prevents the sterilizer from ever running dry during actual use.

The instruments when needed, or after use, are simply removed to and from the sterilizer by the aid of the wooden forceps already mentioned, which were made of this material to withstand the action of the formaldehyd solution. The instruments during use are dropped on a sterile towel or placed within a dish containing a 1 per cent. solution of liquor cresolis compositus.

Sodium carbonate to the amount of 3 or 4 ounces placed in sterilizer each morning largely prevents the formation of rust or oxids on the utensils. A few turns on a barber's strop or hone of the cutting-edged instruments after being dried, when the Bunsen gas flame is turned off each night, maintains the sharp cutting surface. The low degree of moist heat present of 100 C. as concerns the steel does not appear to have any deleterious effect on the temper of this metal.




Apparatus for continuous sterilization of instruments.

The sterilizer may be heated continuously either with electricity or with gas, aided with a Bunsen flame.

I am greatly indebted to Dr. D. P. Bush, assistant medical officer, for suggestions in connection with the method and for help otherwise extended.

1. The United States Army Medical Corps used this agent for the sterilization of the skin previous to the injection of antityphoid vaccine.

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# A CHEAP AND PORTABLE APPARATUS FOR FORMING CARBON DIOXID PENCILS

GOUVERNEUR H. BOYER, M.D., POTTSVILLE, PA.

Many physicians are no doubt deterred from using solidified carbon dioxid pencils for freezing off moles, warts and epitheliomata, by the cost and cumbersomeness of the large tank of liquid carbon dioxid commonly used for making the pencil.

Prest-O-Tire tubes are small steel tubes filled with liquid carbon dioxid, sold for inflating automobile tires. They weigh less than 2 pounds and can be carried in the usual surgical

bag. The original cost is but $1.25 and an empty tube may be exchanged for a full one at a cost of 20 cents. They are used with a puncturing valve made by the same manufacturers and costing $2. The total cost of the installation is therefore $3.25; the cost of use is 20 cents for each time used.

To make the pencil of solidified carbon dioxid, remove the connecting tube from the valve proper, tie with string a piece of chamois, 3 inches square, around the mouth of the valve and close the end of the tube thus formed with a hemostat. Then screw the valve tightly into the tube of compressed gas and operate it as the label describes for inflating tires. Test

Apparatus for forming carbon dioxid pencils and method of making.

the contents of the chamois tube by feeling it, and when it feels solid you have a stick of solid carbon dioxid ready for use.

## A CATHETER KNOTTED IN THE BLADDER

WILLIAM J. ANDERSON, M.D., CHICAGO
Night Warden, Cook County Hospital

The object in reporting this case is to point out the possible danger in the passing of a soft rubber catheter. This may apply more especially to the female, in whom several inches of tubing may be inserted into the bladder without any particular difficulty. According to the U. S. marine service there are thirty classified knots, and a maritime expert who has examined the specimen in this case says that this knot cannot be classified.

*Patient.*—Max L., a Russian, married, aged 35, a baker, was admitted to Cook County Hospital March 18, 1912. Several months previously patient consulted a physician who advised him to use a soft rubber catheter on account of retention of urine due to a supposed enlarged prostate gland. He used this catheter several times and mislaid it.

On the morning of admittance the patient purchased a section of rubber tubing, cut one end obliquely and inserted it into the meatus through the penis and into the bladder. Urine was voided but patient was unable to withdraw the tube. Since then he had been able to pass a small amount of bloody urine around the tube but none through the tube.

*Examination.*—A medium-sized soft rubber tube, about the size of French No. 12 in urethra, protruded about 4 inches from the meatus. I was unable to remove it by traction. On rectal examination, the tube could be felt in urethra, anterior to the prostate which was slightly enlarged and firm. A radiograph was taken showing that the tube was knotted, this evidently being the reason it could not be withdrawn.

*Treatment.*—Suprapubic cystotomy. The catheter was stretched through anterior urethra and cut short. The loops within bladder were grasped with forceps and removed. French No. 32 sound passed through urethra into the bladder, and latter was washed out. The catheter was inserted through

Catheter knotted in the bladder.

the penis into the bladder and retained by stitch through glans penis. A rubber tube was retained in the bladder through the abdominal incision. Recovery followed.

## TEN PELLAGRINS IN ONE FAMILY

J. E. KNIGHT, M.D., WAYCROSS, GA.

CASE 1.—In June, 1911, A. C., a man, aged about 40, came to the A. C. L. Hospital for something to cure his sunburned hands. Diagnosis was made of pellagra and the man put on treatment. When the patient first came to the hospital, a symmetrical dermatitis was to be seen on the back of both hands, extending half way up the forearms, and a slight dermatitis on both cheeks, on back of both ears and on both feet. The mucous membrane of mouth was entirely gone in most parts and that which remained was diseased. The patient gave a history of early morning diarrhea that was first noticed in the spring of 1909. His appetite was good, but his digestion poor. He complained a great deal of hands and stomach burning. He would wake up in the middle of the night with this; he said that he felt as if his hands were on fire and his abdomen full of hot coal. The patient seemed to be improving, when mental symptoms became marked and the man got up in the middle of the night and tried to kill his family; he declared that he had been poisoned. The next morning he was put in the county jail and then sent to the state asylum. Reports from there show his bodily health very good but mental condition practically unchanged.

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CASE 2.—In April of this year, while at the home of this patient, I noticed several of his children with the dermatitis on the hands. On thorough investigation I found that Mrs. M. C., aged 38, wife of the patient just described, had noticed in September, 1911, that her hands were slightly sunburned and that she had a diarrhea at the same time. On careful examination I found only a slight trace of the dermatitis but the mouth was denuded of the mucous membrane in several places and some ulcers were present. Mrs. C. is the mother of nine children, ranging from 2 to 20 years of age. Three of these are by her former husband, who is now dead; the other six are by the present living husband.

CASE 3.—J. T., aged 20, oldest child by the first husband of Patient 2, showed a symmetrical dermatitis on both hands, denuded mucous membrane in mouth and history of diarrhea. He appeared well nourished, but suffered from insomnia. He first noticed the symptoms described in March, 1911, but all of these cleared up so he did not see any doctor. In February, 1912, the symptoms returned.

CASE 4.—R. T., aged 18, was very anemic and poorly nourished; the symptoms were the same as his brother's, except much more marked; they were noticed first in May, 1911, and then again in April, 1912.

CASE 5.—S. T., a girl, aged 17, showed no lesions on hands at this time, though mouth showed denuded areas; there was

Eight children, of one family, all suffering from pellagra. The parents, who also have the disease, objected to having their pictures taken.

a history of diarrhea. Patient says her hands were like her brother's, but they got well without any treatment. Slight diarrhea was still present.

CASE 6.—L. C., girl, oldest child by second husband, was examined next. She showed a marked dermatitis on both hands, both cheeks, diarrhea and diseased mucous membrane in mouth. Physical examination showed a very poorly nourished child with a mitral regurgitant lesion. She first noticed pellagra symptoms in April, 1912.

CASE 7.—M. C., a girl, aged 9, with dermatitis on hands and face, very marked, gave a history of diarrhea, and mouth showed a diseased mucous membrane. Symptoms were first noticed in April, 1912.

CASE 8.—Next, R. C., a boy, aged 8, showed dermatitis on both hands, mucous membrane of mouth diseased and history of diarrhea. Symptoms were first noticed in April, 1912.

CASE 9.—M. C., a boy, aged 6, showed same condition and same history as those of the previous patient.

CASE 10.—R. C., aged 4, showed marked dermatitis on both hands; he gave history of diarrhea, and mucous membrane of mouth was sore.

Baby C., aged 2, showed no symptoms as yet.

The three youngest children have recently had measles, the older ones having had it previously. Examination for hookworm showed all but the mother and baby infected, also showed L. C. infected with *Ascaris lumbricoides*.

*Treatment.*—A specimen of the corn-meal used was examined and found to be unfit for human consumption. The patients said that on several occasions the meal bought would be so moldy before it was used up that they fed it to the stock on the place. Corn in all forms was prohibited to these people, intestinal antiseptics were prescribed and at present (May, 1912), all are doing nicely. R. C., however, has run away from home and gone to Winoker, Ga.

I wish to thank Dr. T. F. Abercrombie, of Atlanta, and Dr. M. M. Johnson, of Wayeross, Ga., for courtesies showed me with these patients. Both of these physicians went to see the patients with me and confirmed the diagnosis.

Gilmore Street.

## A SIMPLE AND PRECISE METHOD OF DIFFERENTIAL LEUKOCYTE COUNTING WHERE THE WHITE CELLS ARE GREATLY INCREASED

PHILIP ATLEE SHEAFF, M.D., PHILADELPHIA

In a recent case of splenomyelogenous leukemia in which the leukocytes approached 350,000 per c.mm. the great abundance of white cells in the stained spread made an accurate differential count almost impossible. After some delay, however, the task was easily and accurately carried out by cutting a square from the end of a microscopic slide of just the exact size to fit within the eyepiece and rest on its diaphragm.

With a glazier's diamond, and by most delicate pressure, four lines were ruled parallel with each side of the square and forming a small square in its center. This, when placed in the eyepiece, the lines being down, gave the outline of a small square on the stained spread and within the usual round field and permitted the easy and accurate counting and classification of cells within its borders, the slide being moved to include a new lot in proximity to the first, and the operation repeated as often as necessary until the total number of cells required for the count has been made.

4008 Baring Street.

## *Special Article*

## TYPHOID FEVER IN ST. CHARLES

[*By Our Special Commissioner*]

St. Charles, Illinois, is a town with about 4,500 inhabitants (population 1910, 4,046) located 40 miles west of Chicago.

Sixty cases of typhoid were reported to the St. Charles health department during the eight months preceding May, 1912, or approximately one case for every seventy-five inhabitants.

Prior to the recent outbreak no cases had been reported to the health department since 1907, in which year six cases were recorded. On inquiry among the physicians in the city it was found that a few cases had been observed during the intervening years, but that they had attracted no particular attention and had not been reported to the health officer.

Geographically St. Charles is a compact town lying on both banks of the Fox River. The river divides the city into an eastern and a somewhat smaller western section. These two divisions constitute the main part of the town. A short distance west of the western section is a settlement of recent Belgian immigrants connected with the business district by a single road. In this isolated settlement, composed of about 150 people, the first case of typhoid appeared about Oct. 18, 1911. This case was

more or less directly responsible for thirteen others, as described below.

The attending physicians said that it was impossible, during the early cases in the settlement, to enforce necessary sanitary measures. Especially was it difficult to secure the isolation of patients. Large families occupied small cottages. A small two-storied structure housed in one instance two families, among whom there developed four cases of typhoid. The healthy members of the household were of necessity in close proximity with the sick, with consequent increased danger of contact infection. In addition, the physician's order that the patient be isolated was often overruled and bedside visits were frequent. This disregard or ignorance of the danger from infection undoubtedly caused the extensive spread of the disease. The thirteen cases immediately following the appearance of typhoid in the Belgian district are believed to be contact infections.

Water from the various wells used by these families was tested bacteriologically by the State Water Survey under the direction of Professor Bartow and in all instances the water was pronounced safe for drinking purposes.

Three of the seven families in which typhoid appeared were on the same milk-route—designated later as "M." Only one milk-dealer, however, sells milk in this section of the town and no other cases appeared among his customers in other parts of the town at this time.

The order of development of the cases in the first two of the seven families affected will serve to illustrate the method by which the contagion spread.

| Case No. | Family No. | No. of Cases | Date of Onset | |
|---|---|---|---|---|
| 1 | 1 | 1 | 10/16 | Origin not known. |
| 2 to 5 | 2 | 4 | 11/2 | Woman who helped care for No. 1. |
| . | . | . | 11/13 | Four-year-old son of No. 2. |
| . | . | . | 11/16 | Ten-year-old child of No. 2. |
| . | . | . | 11/20 | Seven-year-old child of No. 2. |

The remaining nine cases, because of similar circumstantial evidence, are regarded as contact cases. All were Belgians and all were close friends. In every case there was an interval of from one to three weeks from the time of known contact with a typhoid patient to the appearance of the disease in the exposed individual.

Typhoid in St. Charles was confined to the Belgian community until the middle of January. From the middle of January to the middle of May there were forty-four new cases rather evenly distributed throughout the main part of the town on both sides of the river. The probable relation of this second outbreak to the circumscribed series of cases in the settlement will appear presently.

A record of cases had been compiled by Dr. Van Patten of the health department, and was kindly placed at our disposal. This was supplemented by a partial house-to-house canvass of the typhoid patients and by interviews with the physicians.

The water-supply of St. Charles is obtained from two wells about 800 feet deep. The greater volume of water is forced directly from the wells to the town mains. The remainder is stored in a stand-pipe near the pumping-station. Tap-water collected at several points in the town showed a low bacterial count with no evidence of intestinal bacteria. There was an emergency pipe to an intake in the river that had formerly been used in case of fire. This pipe had not been used, it was stated, for over four years. The onset and age distribution of cases were not such as are ordinarily found in water-borne epidemics.

The milk-supply of St. Charles is handled principally by two dealers, M and N. M produces no milk but buys of two farmers, A and B. No history of typhoid could be obtained among the workers on the farms, or in M's milk-depot. J, a worker in M's plant, had been sick the week before Christmas. The ailment did not resemble typhoid, and attempts made by us to demonstrate the presence of typhoid bacilli in the feces and urine of this man were not successful.

N lived about two miles from town on his own farm and produced all the milk he sold. Conditions about the barn were fair. The cooling and bottling shed was admirably located and well kept. On N's farm the milk was handled largely by N himself. Neither N nor his help had ever been known to have typhoid.

On the outskirts of the town numerous families kept one or two cows and sold milk to their neighbors.

TABULATION OF CASES WITH REFERENCE TO THE MILK-ROUTES *

| | Milk-Routes | | | |
|---|---|---|---|---|
| | M. | N. | Others | Total |
| 1/10/31 | 1 | 2 | 0 | 3 |
| 2/1/15 | 4 | 1 | 1 | 6 |
| 2/15/29 | 6 | 2 | 0 | 8 |
| 3/1/15 | 7 | 2 | 3 | 12 |
| 3/15/31 | 4 | 1 | 2 | 7 |
| 4/1/15 | 0 | 1 | 0 | 1 |
| 4/15/30 | 3 | 1 | 0 | 4 |
| 5/1/9 | 1 | 0 | 0 | 1 |
| | 26 | 10 | 6 | 42 |

* No milk used in two cases.

Thirty-eight of the forty-two cases using milk were in thirty-eight different houses. Two developed in each of two families. In one instance, both cases appeared within four days, indicating some common origin. In the other family, fifteen days elapsed between the appearance of the first and second cases, possibly indicating a secondary or contact infection.

The age distribution of the cases is as follows:

| Years | Cases | Years | Cases |
|---|---|---|---|
| 0- 5 | 4 | 20-30 | 16 |
| 5-15 | 4 | 30-40 | 3 |
| 15-20 | 13 | 40-45 | 2 |

The following table shows the approximate number of customers on each of the milk-routes and the number of cases developing on each.

| Milk-Route | No. of Customers | Cases of Typhoid |
|---|---|---|
| M | 470 | 26 |
| N | 250 | 10 |
| All others | 150 | 6 |

Of the six cases of typhoid developing among families not using milk from dairies M or N, two were in all probability contact cases. In one instance a woman took care of a boarder, a young man sick with typhoid. Sixteen days after she began to care for this man she came down with the fever. The other suspected contact infection took place through laundry collected at a home in which there was typhoid. The girl employed to sort the laundry as it came in became sick about two weeks after the parcel of laundry in question had been received. Of the remaining four patients to whom neither M nor N regularly supplied milk, three were young men accustomed to taking meals at various lunch-rooms in the town at which milk from M's dairy was used. Practically all of the ice-cream used in St. Charles was made by M with uncooked milk. The dirty milk-bottles brought in by the wagons were washed in the room used

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for the manufacture of ice-cream and the same help was employed in both operations.

Assuming, then, that these men used milk from M's dairy occasionally, we find that of the forty-two patients known to have used milk, there were only three who did not receive milk from dairies M or N either all or part of the time, and that of these three, two were in all probability secondary or contact cases.

The probable explanation of this second and larger outbreak of typhoid in St. Charles may be found in the methods used in handling the milk-supply.

The Belgian community located west of the city proper had had about one in ten of its entire population down with typhoid during the fall and winter of 1911-12. There had in several instances been from two to four cases of typhoid in each family in which the disease obtained a foothold. This indicates a failure on the part of these families to observe sanitary methods in the care of the patients and in disposing of infectious material. Three of these families used milk from dairy M. Two of the three had, during the winter, four cases each of typhoid.

It is reasonable to suppose that these families, careless as they were of their own safety, neglected to sterilize the outgoing milk-bottles. M's wagon collected the bottles from these homes. At the bottling room of M's plant these bottles were washed *but not sterilized*. They were then filled with milk and delivered to customers, thus furnishing a vehicle for the transfer of typhoid bacilli from the typhoid patients in the Belgian settlement to the customers of M in the city proper.

There were several houses in the city proper, containing more than one family, to which both M and N supplied milk. No great attention was paid at such places as to whose bottles were collected by a given dairyman. The driver of one wagon, on leaving the appropriate quantity of milk, took hastily a corresponding number of empty bottles and departed. In this way it is known that M's bottles were often collected by N. By means of this interchange of bottles the infection may have been introduced on N's milk-route.

On February 20, the health commissioner, Dr. Van Patten, suspecting milk to be the infectious agent, issued an order prohibiting the collection of milk-bottles from houses known to contain typhoid patients and requiring the milk-dealers to sterilize their bottles by boiling for at least twenty minutes. Beginning February 21, attempts were made at sterilization of the milk-bottles, but the improvised apparatus was inadequate for the task, and it was the last of February or the first week of March before the permanent apparatus was installed in both the dairies and sterile bottles were insured. Whatever the source of the contamination, it ceased to be operative by the first or second week of March.

### SUMMARY

Two definite outbreaks of typhoid occurred in St. Charles between October, 1911, and May, 1912. One, beginning in the Belgian settlement west of the main part of town, was evidently spread chiefly by contact infection. It was restricted to a group of Belgian workmen and their families.

The second outbreak began about the middle of January and was apparently caused by a contamination of milk through bottles collected from infected families on milk-route M. The infection was carried to N's customers through an exchange of the bottles between routes M and N, and was practically checked by a regulation enforcing sterilization of the bottles.

## Therapeutics

### DUODENAL ULCER

Perhaps no abdominal condition is just now so much in the foreground as duodenal ulcer. Well-aimed surgery and exploratory incisions have demonstrated that this condition is of frequent occurrence, and a very frequent cause of chronic abdominal pain and chronic indigestion, to say nothing of more or less permanent debility. It has been shown that there is, generally, a tangible excuse for gastric indigestion, hyperacidity (or hyperchlorhydria as it is termed), and for abdominal distress as well as actual abdominal pain. In other words, dyspepsia, gastralgia, nervous indigestion, neurasthenia, hysteria with gastric crises, and neuroses of the stomach are beginning to be terms that must be defended rather than used as diagnoses back of which one may hide.

It is generally agreed that chronic appendicitis or recurrent subacute appendicitis or the adhesions caused by an old appendicitis can be the cause of gastro-intestinal indigestion, and that nothing but removal of the appendix will offer a permanent cure.

The gall-bladder has of late years been better understood, and chronic cholecystitis and adhesions from a previous more or less acute cholecystitis are recognized as causes of gastro-intestinal indigestion that cannot be cured without surgical procedures. Without an actual inflammation of the gall-bladder, small gall-stones may become fixed in the various ducts, or concretions may form in the ducts, not properly placed or not large enough to cause obstruction, and yet give continuous reflex symptoms or actually cause inflammation in some of the bile ducts, and perhaps congestion and disturbance of the function of the pancreas, if not an actual chronic pancreatitis.

A recurrent catarrhal duodenitis with not sufficient congestion or swelling to cause obstruction to the common bile-duct and therefore jaundice, but sufficient to cause at times considerable indigestion, considerable distress and pain, constipation at one time and diarrhea at another, with a slight yellowing of the sclerotics, with a trace of bile in the urine, has been recognized by some physicians for many years, and such physicians as noted this condition were close to the diagnosis. But it seems that this condition is probably very frequently caused by an exacerbation of trouble from a recurrent inflammation of a healed duodenal ulcer. The very conditions that are now shown to cause recurrence of ulcer of the duodenum were the very things that seemed to cause a recurrent duodenitis, viz., exertion, chilling, or something very irritant in the food, such as mustard.

The symptoms of duodenal ulcer may be tabulated as: (1) a prolonged or recurrent history of epigastric distress and dyspepsia; (2) pain, or at least distress; (3) symptoms of gastric hyperacidity; (4) blood in the stools.

An ulcer of the duodenum gives a more variable story of improvement than does ulcer of the stomach. This is perhaps because there is more tendency to heal where the surrounding food and liquid is more or less constantly alkaline, while in the ulcer of the stomach the food and liquid are more or less constantly acid. Whatever be the cause, the intervals of improvement of ulcer of the duodenum are very typical. Indiscretions in diet in which the food becomes exces-

sively acid, or remains long in the stomach (possibly from an overindulgence in alcohol) and thus becomes very acid and therefore very irritant, or when the patient takes a large amount of very acid drinks, mustard, red pepper, Worcestershire sauce, or sour peppered pickles, all may be predisposing causes to reirritation and reulceration of a healed or quiescent ulcer. Chilling of the surface of the body from low temperature or the simple chilling of the body from insufficient covering at night contracts the blood-vessels of the surface and increases congestion in the abdomen and a quiescent ulcer may recur.

The diagnosis may be made from the suggestive history as above described, from a feeling of hunger or a sense of "all-goneness," which is satisfied by any simple food, or real pain which is lessened by a simple bland food or by water, especially an alkaline water. If the pain caused by such an ulcer is not improved by warm, bland alkaline drinks, such as perhaps milk, or by such a drug as milk of bismuth or milk of magnesia, probably the pain is partially due to dragging or pulling on adhesions caused by the ulcer. Sometimes the pain does not occur until a short time after a meal, and perhaps not until two hours after a meal. This is very characteristic. Pain that is absent between meals and develops only after eating will occur sooner or later after a meal, depending on the character of the food taken. If it is a liquid, it will soon pass to the duodenum. The more fluid the food, the more easily digestible, and the sooner it will pass to the duodenum and perhaps cause pain. The more solid the food and the more peptic digestion necessary, the longer the food will remain in the stomach. If the food is very irritating and there is marked hyperacidity the pylorus will remain closed for some time.

Or the duodenal ulcer may cause such reflex irritation of the pylorus as to cause it to have attacks of spasm. Such contractions of the pylorus are the forerunners of gastric dilatation, and yet there may be no real obstruction at the pylorus, although if the ulcer is near the pylorus contractions as well as adhesions may cause permanent obstruction.

The pain is generally located by the patient in the central epigastric region, but may be referred to the right side, and often to the back. In a large number of cases, but by no means all, a tender point will be noted by the patient just to the right of the median line in the central epigastric region. There may be a tender point nearly opposite on the back near the spine. There may be tenderness in the pancreatic region and tenderness may be referred up under the ribs. The right rectus muscle is often hypertrophied and often resistant to pressure, much as is noted in appendix inflammation.

From reflex irritation hyperacidity of the stomach is frequent, and with this pyrosis, heartburn and gastric flatulence occur. The tongue is more or less coated and is often dry, and the patient often complains of thirst. The bowels are likely to be constipated, although there may be recurrent diarrheas.

A considerable number of these symptoms and signs are duplicated by chronic appendicitis, chronic cholecystitis, gall-stones and chronic pancreatitis. A differential diagnosis is aided by the above findings and history plus hyperacidity of the stomach and the finding of blood in the stools.

A tangible amount of blood in the stools, with the liver intact, and the above symptoms present, generally means an ulcer in the gastro-intestinal tract. Ulcer may be present without blood appearing or being found in the stools at any one given time. Repeated examinations may frequently show blood, but even then not always. Traces of blood, or occult blood, even with all meat removed from the diet for at least forty-eight hours is rather an unimportant finding. Mucous membranes can readily ooze a trace of blood.

A patient with a history pointing toward ulcer of the duodenum should have the duodenal contents examined, at least by the simple regurgitant method, viz., the administration of a few ounces of olive oil given after the stomach is washed out and is known to be empty, and then this oil withdrawn from the stomach in a half hour. The olive oil seems to cause a regurgitation or at least an opening of the pylorus which allows some regurgitation of the duodenal contents into the stomach and the fluid and oil that is thus removed will separate on standing. Examination of this fluid may give a number of clues as to the condition of the duodenum.

The Cammidge reaction of the urine should be noted to test the condition of the pancreas. While this test has been shown not to be absolute, still the absence of this reaction permits the assumption that the pancreas is in a healthy condition and obstruction or disturbance is not probable at or near the orifice of the pancreatic duct.

An examination of the stools should also be made to determine the presence of blood in any amount, to note the presence or absence of an abnormal amount of fat, of undigested meat fibers, of crystals, of bile; and the reaction to litmus should be taken.

The urine, besides being tested for the Cammidge reaction, should be especially tested for bile and indican.

### TREATMENT

While there is no question that ulcer of the duodenum is a surgical condition, that operative interference is the only radical cure, that there is danger from prolonged ulceration causing adhesions to or inflammation in adjacent organs, that an ulcer in healing may cause narrowing of the duodenal canal and perhaps more or less obstruction, and that an unhealed ulcer may be the irritating cause of a future localization of carcinoma, still, many patients will not submit to operation, and instances of cure and healed ulcers are frequently seen on autopsy and apparently often clinically occur. Consequently, there is plenty of justification for the medicinal cure or medical management of duodenal ulcer.

Prerequisites of such treatment are:

1. The teeth, gums, mouth, tonsils and pharynx, if in bad condition, must all be properly treated and put into as nearly perfect order as possible.

2. A test breakfast, a test of the duodenal regurgitated fluid and a test of the feces must be made to determine, if possible, exactly the amount of disturbance in the digestive tract that is present.

3. The urine must be carefully examined to determine any liver, pancreatic and kidney disturbance.

4. The blood must be studied to determine the seriousness of the condition and the latent or reserve strength of the patient.

All of the above having been accomplished, the physician is ready to carry out the treatment. The treatment consists of:

1. The administration of a cathartic the night before the patient begins his treatment, such as the following:

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| ℞ | Gm. | | |
|---|---|---|---|
| Hydrargyri chloridi mitis..... | 15 | | gr. iiss |
| Pulveris rhei ..... | 25 | or | gr. iv |
| Sodi bicarbonatis ..... | 50 | | gr. x |

M. et fac chartulam 1.

Sig.: Take at bedtime with a cup of malted milk or other bland nutriment.

2. Absolute rest in bed for three weeks.

3. Early in the morning of the first day the patient should receive 10 gm. (2½ drams) of Rochelle salt, given in a glass of hot water. This, with the cathartic of the night before, will cause as near as possible surgical cleanliness of the intestine; and, as elsewhere, an ulcer must be kept as clean as possible.

4. Dry heat should be applied to the abdomen more or less constantly for ten days, best with an electric pad.

5. There should be no food for forty-eight hours.

6. A glass of hot water with a quarter of a teaspoonful of salt and a quarter of a teaspoonful of sodium bicarbonate should be given every four hours for four times. There should be no more water given for ten or twelve hours, except in sips as needed for thirst. The object of this is to clean off the mucus thoroughly from the inflamed duodenum, and then to give the stomach and upper intestine an absolute rest.

7. After forty-eight hours, viz., on the third day, very small quantities of nourishment should be given. The food must not excite the stomach to the production of much hydrochloric acid, as it is better to prevent its production or secretion rather than to administer olive oil, butter or atropin to stop it. This means that no meat or meat-juices or meat extracts or broths should be given, although some clinicians seem to find meat chopped fine and prepared in various ways a most valuable food, even in the early stage of the treatment of this disease. The nourishment should be in small amount so as not to cause distention of the stomach and thus to interfere with the cure of any dilatation that may previously have been present. As soon as possible, of course, the food must contain sufficient calories to prevent further loss of weight, even if not much is gained for the first ten days. A very good nutriment for this period, viz., beginning on the third day, is a predigested and alkalized milk, i. e., 2 ounces of peptonized hot milk with an ounce of Vichy, drunk slowly, and given every three hours during the third day of treatment. On the fourth day 3 ounces of peptonized milk and 1 ounce of Vichy should be given hot every three hours.

8. Two and one-half hours after every other administration of peptonized milk, viz., every six hours, and one-half hour before the next feeding, a glass of hot water should be given to wash the stomach and duodenum; or, if hot water is objected to, a clear, clean, fresh clam broth may be given.

9. On the fourth day the bowels should be moved by an enema, and this should then be daily repeated until later in the treatment.

10. On the fifth day 5 ounces of peptonized milk and one ounce of Vichy should be given every six hours, alternating every six hours with 5 ounces of a thin, strained oatmeal gruel given hot, and followed by 2 ounces of warm Vichy; in other words, one or other of these feedings every three hours.

11. As the patient needs iron, and he is receiving no meat, a 3-grain tablet of saccharated oxid of iron should be given twice a day with the nourishment for a period beginning with the fourth day of the treatment. The tablet should be powdered before taking.

12. On the sixth day the cereal (oatmeal gruel, salted) should be continued and a raw egg on cracked ice with a trace of lemon juice should take the place of one milk feeding. The other feedings of milk on this day should be not peptonized but given with Vichy as before.

13. Hot water at least twice a day should be given one-half hour before a nourishment.

14. After ten days there should be a gradual increase in the food; first two raw eggs; then they may be cooked; shredded wheat biscuit, malted milk, junket and gelatin flavored with lemon or orange (no alcohol, tea, coffee, and only exceptionally tobacco, should be allowed) may be given. Later, finely chopped fresh chicken, roasted oysters in season, fresh steamed soft clams, chopped little necks served in broth, mutton, chicken and beef broths may be gradually added to the now increasing diet. Still later, chopped beef made into a pâte and broiled may be given once a day, and the frequency of the feedings changed to five times a day, then to four times. Water may now be taken cool but not cold, but not much liquid should be given or allowed with any one meal, so as to prevent still longer the stomach becoming distended.

15. The daily enema for the bowels should be given for ten days, which, with the four days before such treatment was used, means up to two weeks from the beginning of the treatment. Nothing else should be given to cause bowel movements unless they are very unsatisfactory. If such is the case, a sufficient amount of effervescing sodium phosphate may be given each morning, in hot water, but it should not be taken until it has nearly finished effervescing—not while it is storming.

16. After two weeks the enema should be stopped and sodium phosphate in the morning should be relied on to cause a movement of the bowels.

17. The patient having been in bed for three weeks, convalescence to last a week should be inaugurated. This means a gradual getting up as from typhoid.

18. The patient having recovered from his illness and its treatment, should take one month's rest, i. e., at the end of the four weeks, at some country, mountain, or sea shore resort, depending on the time of year. Or, if this is impossible, a month's rest at home, with plenty of out-door air, should still be insisted on. At the end of this time, viz., eight weeks, there should be a gradual resumption of his occupation, the patient being careful for a long time not to take into his stomach anything irritant, too cold, too salty, or any harsh, rough food, or anything that is acrid or may become acrid, as grape-fruit, strawberries, or anything that is too acid, as vinegar, pickles, etc. He should also be careful about getting chilled.

19. A laxative tablet will probably be needed for some time. A very satisfactory one is as follows:

| ℞ | Gm. | |
|---|---|---|
| Sulphate of strychnin..... | .0015 | gr. 1/40 |
| Aloin ..... | .02 | gr. 1/3 |
| Powdered ipecac ..... | .03 | gr. 1/2 |
| Extract of belladonna..... | .006 | gr. 1/10 |

This should be taken after supper and not on an empty stomach. If it acts in the night when given at this time, it may be given at bedtime, but not on an empty stomach. The patient should have a cup of malted milk with a cracker or two broken into it before the tablet is taken.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 DEARBORN AVENUE . . . CHICAGO, ILL.

Cable Address . . . . "Medic, Chicago"

Subscription price . . . . . Five dollars per annum in advance

(*For other information see second page following reading matter*)

SATURDAY, JUNE 22, 1912

## REPORT ON HOOKWORM ERADICATION

The second report of the Rockefeller Sanitary Commission for the Eradication of Hookworm Disease, now in print,[1] outlines the activities of the commission for the year ending June 28, 1911, which in the main has been an expansion of the plan of action detailed in the earlier report.[2] The preliminary surveys of the areas of infection in the United States have been nearly completed; a definite, uniform survey to determine the degree of infection by counties as agreed on by the state directors is now in progress; and a report on the extent of infection in fifty-four foreign countries has been published. The practical side of the work—the enlistment of people's interest in the treatment of themselves and their families—has included a wide range of activities. The aid of local practitioners has been secured, county dispensaries have been started, county appropriations obtained, school inspections made, free clinics held at set times, the sanitary surveys of privies extended, and the people have been taught the dangers of soil pollution by means of stereopticon lectures, bulletins and folders, newspaper cuts and notices, exhibits at state and county fairs, school instruction and efforts to improve the health service in separate counties.

The exhibit of the preliminary survey includes a series of maps showing the degree of infection in eleven states, and statistics of its extent in ten of these. Infection has been demonstrated in every county of South Carolina, in nearly every county of Virginia, North Carolina, Alabama, Mississippi and Tennessee, and in twenty-seven out of the fifty-nine parishes of Louisiana, fifty-seven of the seventy-five counties in Arkansas, and twenty-two of the 119 counties in Kentucky. It has been shown to exist in eastern Texas, Florida, California, Nevada, Oklahoma and West Virginia, "with very strong clinical evidence of its presence in Maryland." The maps indicate that the areas of hookworm infection in these states are probably in belts or zones, the heaviest showings being in eastern Virginia and the eastern part of North and South Carolina, in central Tennessee, in the southern half of Alabama and Georgia and in the northeastern corner and southern half of Mississippi, following, as the report says, the sandy coastal plain in the seaboard states.

When the Rockefeller Commission began its work in 1909, the country people of the south did not know hookworm infection as a disease, and, although many of them were experiencing its effects, it was extremely difficult to get them interested in their own proper welfare. In the short space of two years, the effect of missionary work has been such that the people, entirely of their accord, now flock to the public dispensaries and clinics in great numbers. During the present year, nearly a half million people have been reached by means of public lectures, newspaper articles, bulletins and personal visits to teachers. The scientific secretary of the commission, Dr. Stiles, reiterates his view that the sanitary privy is the great problem of the non-sewered districts, and he holds that if all our Gulf-Atlantic states were provided with active, properly trained and compensated county health officers, the labors of the present commission would soon be at an end, as its work is even now rapidly passing into the hands of the most intelligent of them.

## HOOKWORM INFECTION AS A WORLD PROBLEM

As mentioned above, the Rockefeller Sanitary Commission for the Eradication of Hookworm Disease reports a survey of the United States and foreign countries, made to determine the degree and extent of hookworm infection throughout the world. We have already indicated the distribution of the disease in the United States.

Through the agency of the Department of State, the commission sent to American representatives in all foreign countries letters asking for information on five points, viz.: (1) whether or not the country had been found infected; (2) the geographic distribution of infection in the country; (3) an approximate estimate of the degree of infection; (4) whether it is surface or mine infection; (5) what efforts are being made to eradicate or relieve it. In addition, correspondence on the subject was conducted with physicians and health officials in foreign countries.

The results show that hookworm disease belts the earth in a zone about 66 degrees wide, extending from parallel 36 north to parallel 30 south latitude. Practically all countries between these parallels are infected. Of the fifty-four countries found to be infected, the disease is confined to mines in six, Wales, Germany, the Netherlands, Belgium, France and Spain. In at least forty-six countries, aggregating a population of about 920,000,000, the disease is general and wide-spread. The total population of the infected states in this country is about 20,000,000. Together these constitute 58 per cent. of the earth's estimated population of 1,600,000,000.

The degree of infection is heaviest in American Samoa, where it is found in 70 per cent. of the popula-

1. Second Annual Report, Rockefeller Sanitary Commission for the Eradication of Hookworm Disease, 1911 (140 pages), Officers of the Commission, Washington, D. C.
2. THE JOURNAL A. M. A., May 6, 1911, p. 1332.

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tion; in the southern two-thirds of China, in 75 per cent. of the population; in India, from 60 to 80 per cent. of the 300,000,000 population have the disease; in Ceylon, 90 per cent. in many parts; in Natal, 50 per cent. of the coolies on sugar and tea estates; in Egypt, 50 per cent. of the laboring class; in Dutch Guiana, 90 per cent. in many parts; in British Guiana, 50 per cent. of all; in Colombia, 90 per cent. of those living between sea-level and 3,000 feet, which includes most of the population; in 1904, 90 per cent. of the working population of Porto Rico were infected.

The economic loss from the disease is enormous. A physically sound coffee-picker in Porto Rico picks 500 or 600 measures a day; the anemic picker averages from 100 to 250 measures. This disease has lowered the average labor efficiency of the island to 35 or 50 per cent. of the normal. Dr. Herbert Gunn, special inspector for the California Board of Health, states that a 20 per cent. loss of efficiency in the mines is a conservative estimate of the actual results of the disease in that state. Estimating the infection to be present in 50 per cent. of the miners, he believes that a mine employing 300 men would sustain a loss of $20,000 annually. Taking this as a basis, the question is very pertinent as to what is the annual money loss in India with a 70 per cent. infection.

It is sometimes maintained that an acute disease may strengthen a race by removing the weak, but hookworm disease is characterized by its chronicity. It works subtly through long periods of time, and its cumulative effects—physical, economic, intellectual and moral—are handed down as an increasing handicap from generation to generation. What the disease has done for India, Egypt and China, it is now beginning to do for the United States. It is a menace and an obstacle to all that makes for civilization. It destroys economic efficiency and social development on the one hand, as it undermines physical and mental health on the other.

An important factor in the spread of hookworm disease in the United States is immigration. Every country which imports coolie laborers from India is bringing in a constant stream of heavy infection. Of 600 coolies going into Assam, only one was free from infection. The attention of the government at Durban was called in 1908 to the heavy infection among coolies on the sugar estates of Natal. The next shipload from India was examined and 93 per cent. were found infected. Last year at San Francisco a shipload of Indian coolies had 90 per cent. infected. Quarantine was established at once against further immigration of this type. Every group of Indian coolies in California is a center from which the infection is spreading in that state.

The results of the survey show plainly that hookworm disease is not a local affection or of merely local concern. It is of international significance, and the measures directed toward its complete eradication must be international in scope.

## THE CAUSATIVE ORGANISM OF TRACHOMA

Unfortunately the causation of trachoma or "pink-eye" is a subject on which there have been more theories than demonstrable facts. Hence it is a source of satisfaction to see the problem attacked systematically by a well-organized corps of workers, as is being done by the Health Department of New York City, under the supervision of William H. Park.

The characteristic pathologic findings in trachoma, which have been noted by many observers, consist of certain granular inclusions in the epithelial cells of the conjunctiva. Some hold that these are the cause of the disease and have classified them as protozoa; others consider them as involution forms of gonococci or other bacteria. A group of ten workers in the Research Laboratories of the New York Health Department have made a bacterial study extending through more than a year's time. Their report[1] suggests a new explanation of the trachoma bodies. In this investigation measures were taken to secure examination of as large a number of cases as possible. Complete histories were kept systematically with detailed descriptions of the eye conditions. Bacterial cultures were made by curetting the conjunctival membrane lightly, rubbing it with a sterile swab and transferring the matter obtained to plates of various mediums. In most cases thus examined a tiny Gram-negative, strictly hemoglobinophilic bacillus was obtained. In blood-broth these bacilli grew in small granular masses taking a brilliant red when counterstained with fuchsin. When stained by Giemsa's method these masses showed characteristics similar to those of the epithelial inclusions, and to the "initial bodies" described by Lindener.[2] A comparison of these forms in smears by various stains led the observers to suggest their identity.

The finding of a Gram-negative hemoglobinophilic bacillus in cases of trachoma has been reported by others. Edwards[3] reported such an organism which he called *Bacillus trachus* and suggested it as the causative agent of trachoma. After a detailed examination and comparison the New York workers were unable to find a distinguishing characteristic between any of the strains isolated from their 213 cases or between these and the *Bacillus influenzæ*. The further differentiation or identification of these organisms remains to be established. The finding of these bacilli in a large percentage of cases among both Americans and immigrants adds evidence against the statement that the bacterial findings in trachoma are not constant in different localities. The failure to find the gonococcus or any organism similar to it in typical trachoma would seem to discredit the theory that the gonococcus or some modification of it is the causative agent. The cases reported constitute probably the most extensive series of observations on trachoma yet published, and mark a distinct advance in our knowledge of this disease. The fact that the growth of

1. Proc. New York Path. Soc., 1912, xii, 17.
2. Lindener: Berl. klin. Wchnschr., 1909, xxii, 1697.
3. Edwards, R. T.: THE JOURNAL A. M. A., 1910, liv, 965.

the organism is inhibited by the presence of certain streptococci suggests an interesting line of investigations directed toward a rational treatment. It may also explain the negative results often obtained in attempting to cultivate the organism from cases of trachoma. A more complete understanding of the bacteriology of trachoma will assist in formulating a rational prophylaxis and treatment of the disease. Further observations by this corps of workers will be awaited with interest.

## THE ACTION OF SERUM ON CARCINOMA CELLS

The success of immunologic methods in the diagnosis of infectious diseases was followed by numerous attempts to discover specific bodies — antigens and antibodies — in cancer. It was hoped that in this way light might be thrown on the nature of cancer and methods of early diagnosis obtained. But the investigations carried out from this point of view have not yet given results of any practical significance. With respect to complement deviation, allergy, specific precipitation and hemolysis cancerous persons do not seem to be constantly peculiar in any way.

The only reaction of this general character of any promise of importance is the meiostagmin reaction of Ascoli.[1] This reaction depends on the fact that when antigen and antibody unite there results a diminution in the surface tension of the mixture which makes itself evident by an increase in the number of drops in a certain quantity of the fluid. In their experiments Ascoli and Izar made use of an alcoholic ether extract of mammary carcinoma as antigen, and the serum of cancer patients as antibody. Altogether a positive meiostagmin reaction has been obtained 209 times in 234 cases of carcinoma, that is, in 89 per cent.; in 233 normal and non-carcinomatous persons the reaction was positive only three times. It would seem then that this reaction merits further attention.

The reaction recently elaborated by Freund and Kaminer[2] rests on a different basis. In view of the great variation in the formation of metastasis in cancer it would seem that individual disposition must play an important part in the development of malignant tumors, whatever the real etiologic factor may be. Assuming that the blood contains a factor that protects the body against invasion by tumor-cells, especially carcinomatous, Freund and Kaminer undertook to determine the effect of normal serum and of serum from carcinoma patients on cancer cells. They find that at 37 C. normal serum exercises a distinctly solvent effect on carcinoma cells in the course of twenty-four hours, whereas the serum from carcinoma patients has no such action. The carcinoma cells are obtained from fresh material and suspended in 0.6 per cent. solution of sodium chlorid and 1 per cent. acid sodium phosphate. The solvent in the serum is not dialyzable, is soluble in ether, is precipitated by alcohol and destroyed by heating at 56 C. While the serum of carcinoma patients lacks this solvent substance, it is asserted also that it may contain a substance which protects the cells. In cases in which the reaction indicated the presence of carcinoma, Freund and Kaminer found this diagnosis to be wrong in 12 per cent. In other series the number of positive results in non-carcinomatous cases is smaller. It is said that on removal of carcinoma the serum soon loses its power to dissolve carcinoma cells.

Further studies are required before any definite conclusions may be drawn as to the diagnostic value and significance of this reaction. It is of interest that Kraus and Ishiwara find that the blood from the umbilical cord has no effect on carcinoma cells, and that the cells of human embryos are sometimes dissolved by normal serum, and are not dissolved by fetal serum. The maternal serum behaves like ordinary normal serum. They also find that normal serum dissolves carcinoma cells and embryonal cells, carcinoma serum, however, dissolving only the embryonal cells.

1. Ascoli and Izar: München. med. Wchnschr., 1910, lvii, 403.
2. Freund and Kaminer: Wien. klin. Wchnschr., 1911, xxiv, 1759.

## PENTOSURIA

Pentosuria, first recognized by Salkowski twenty years ago, no longer belongs among the extreme rarities of pathologic metabolism. A considerable number of cases in which pentoses, or five-carbon sugars, were excreted in the urine have been described accurately in medical literature. The essential urinary symptom has been stated in some instances to manifest itself in more than one member of a family, so that pentosuria resembles in this respect some of those other rare anomalies of metabolism like alkaptonuria, which are now known to exhibit traits of inheritance. Manifestations such as these are as a rule accidentally discovered through faulty diagnosis involving a routine urinary examination for other symptoms; there is seldom any immediate occasion to suspect the perversion of nutrition which they present. It is therefore more than likely that pentosuria passes unnoticed in not a few individuals whom the absence of conspicuous signs of ill health protects from more careful examination.

Despite the repeated detection of pentoses in the urine of man — more than thirty cases being known — the exact identification of the sugar present has been effected in very few instances only. From the standpoint of the metabolic significance and etiology of pentosuria it is quite as important to know precisely which of the five-carbon carbohydrates are here concerned as it is to know that ordinary glycosuria is characterized by the excretion of dextrose, rather than levulose, galactose, sucrose or lactose. Several years ago Neuberg[1] demonstrated the occurrence of the sugar arabinose in the urine of the

1. Neuberg, C.: Ber. d. deutsch. chem. Gesellsch., 1900, xxxiii, 2243.

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pentosuria patient at his disposal. Lately Elliott and Raper[2] have studied another case in which the pentose sugar apparently differs from that described by Neuberg and possibly is ribose. This is interesting because the investigations of Levene and Jacobs have shown that the pentose sugar ribose is present as a constituent complex in some of the nucleic acids.

The carefully examined instances are too few to encourage speculation as to the physiologic history of the urinary pentose. Inasmuch as pentosuria is increasingly more likely to be detected by clinicians, now that more careful routine examinations are being insisted on, the importance of pointing out the cases and furnishing an opportunity to clinical investigators to make further chemical researches on the urines of these patients deserves mention. Quite aside from any immediate help to the individual examined, it should be a pleasant duty for the practitioner to cooperate with the scientific investigator by giving him an opportunity to try to clear up the obscurity in which the real significance of pentosuria is now veiled.

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## THE SAFE AND SANE FOURTH

Each year since 1903 we have been waging a propaganda against the insensate maiming and death-dealing methods of celebrating our independence holiday. We have gathered and collated the indubitable facts; and the lay press — magazines and newspapers — has seconded our endeavors so that an almost revolutionary change has been taking place.

It is gratifying to observe that more and more our constituted authorities have recognized that it is their duty to prevent the burning and crippling of children and their death by tetanus. These officials must take the responsibility, because the sale of fireworks and like destructive agencies is subject to state or municipal control. Official appreciation of this fact is evidenced by the enactment and enforcement of appropriate ordinances. Many officials have in the most salutary way cooperated with non-governmental agencies interested in the safe and sane Fourth. Legislation against fireworks has been restrictive or prohibitive. The latter, of course, gives the best results.

In European countries occasions akin to our Independence Day are commemorated by means of fêtes and other picturesque ceremonies, quite adequately, just as heartily and with as much patriotic fervor as among us. Continental peoples have a genius for festivities, national as well as all other kinds. For adult patriotism, oratory may suffice; but this is not satisfying to the youth of the land. In the legitimate interests of boyhood and girlhood, things equally brilliant and satisfactory must be substituted for the noise, the flare and the varicolored flame; and substitutes even more resplendent have been found in abundance. We have now methods by which the Fourth shall cease to be a day of terror, and shall become instead one of happiness, recreation and enlightenment. Noise is now being replaced by music — the music of bands, and of choruses drilled weeks beforehand by skilled leaders, and the singing of national airs and popular songs. There are tableaux, plays, floats devised by artists, representing historic and patriotic incidents and achievements; parades in which the Army and Navy, the police and fire departments, the militia, school children and industrial organizations take part; picnics with circuses and pink lemonade, peanuts, ice-cream and watermelon sufficient to satisfy the most anacondean digestion; parks and other public places and buildings, both public and private, gorgeously illuminated by electricity; children's carnivals and dances; school celebrations; athletic sports, with distribution of copies of the Constitution, and so on.

And no maimings, no burnings, no killings, no tetanus!

## WATER VERSUS POWDER IN MINING

Mining accidents are unusually frequent among us; "we kill every year more than all the rest of the world besides." There are 800,000 coal miners at work in the United States; upward of 30,000 have been killed and 80,000 injured in the past score of years. This trade is indeed peculiarly dangerous; and herein no doubt lies one among sundry reasons for the strikes of miners — strikes rather more frequent than in other occupations, and which prove unfortunate and even disastrous for many thousands besides the miners and mine owners immediately concerned. For fire is essential to civilization, and most of our fire is obtained from the coal which the miners dig out of the earth. It is said that under normal conditions the mining industry adds every year $2,000,000,000 to the wealth of the United States.

Of course all possible means should be employed to prevent mining accidents and to render mines as safe as possible. To this end the Bureau of Mines, under the directorship of Dr. Joseph A. Holmes, is doing yeoman work. Yet despite all the safeguards now known and practiced dreadful accidents do occur. For example, just as a Pennsylvania state inspector stepped from the shaft of a mine, after giving it a clean bill of health, an explosion took place in that very mine which killed 125 men.

Many mine accidents are caused by the explosion of fire-damp, a substance known also as methane and as marsh-gas, which produces the will-o'-the-wisp. Any unprotected flame or spark may ignite this gas. Blasting-powder used in mines may be tamped too lightly; it may then flare back, become a "windy shot"—a long white flame leaping out straight from the "face." Thus is fire-damp ignited, and an explosion produced. Another cause of explosions is the ignition of blasting-powder through sparks dropped by careless miners or produced by defective electric insulation.

2. Elliott, J. H., and Raper, H. S.: Note on a Case of Pentosuria Presenting Unusual Features, Jour. Biol. Chem., 1912, xi, 211.

It would perhaps be difficult absolutely to prevent such accidents so long as powder is used; but it is said that an assured remedy is forthcoming in the substitution of water for powder in mine blasting. Herr Carl Meissner, a German mining official, knowing of explosions in mines where there were no "gas pockets," became convinced that while the gas might not be a part of the coal, it was nevertheless in the coal seam, or perhaps in the pores of the coal.[1] He believed that if the water could be forced into the pores of the coal, it would drive out the gas. To this end he had built a long nozzle that would fit exactly into the hole bored by the miners for the insertion of their powder. A very small quantity of water—but a few quarts—having been injected, the gas was driven out with a hissing sound; it was then found that by the use of just a little more water, the coal would be sufficiently cracked and broken for a blow of the pick to bring it tumbling down.

Germany, it is reported, is gradually excluding powder from its mines, and is now mining coal by water on a large scale. Mr. Carl Scholz, president of the Rock Island Coal Mining Company, is planning to use this method for his mines in Indiana, Illinois and Oklahoma. The mines in Alabama and West Virginia and in British Columbia are being extensively worked by water instead of powder. It would be gratifying indeed to know of the universal extension of this method of mining.

## Current Comment

### BLOOD-PLATELETS AND BLOOD-CLOTTING

The blood-platelets, long unrecognized or neglected in relation to possible changes in the circulating medium of the body, have at length begun to attract the attention of scientific investigators. They are known to be present in diminished numbers in certain types of disease characterized by abnormal coagulability of the blood; and since the platelets are known to disappear very rapidly in shed blood or to agglutinate into masses which serve as foci for the formation of clots they have lately been associated with the phenomena of coagulation. In a review of recent theories of the coagulation of the blood in these columns[2] attention was directed to some of the factors unquestionably involved in this process. Besides fibrinogen and calcium, thrombin is necessary to complete the formation of fibrin. According to Howell these factors all exist normally in the circulating blood, but are prevented from reacting by the presence of antithrombin. These studies have been extended by Bayne-Jones[3] in connection with the possible rôle of the blood-platelets. In corroboration of earlier investigations of Morawitz he has found that the blood-platelets contain a substance (prothrombin) which, after activation with calcium salts, clots fibrinogen. They also furnish something which can cause certain types of non-coagulable blood to clot. Bayne-Jones concludes on the basis of his observations that "the disintegration and solution of the platelets when blood is shed are helpful or essential to the clotting of blood in two ways: (1) by setting free a quantity of prothrombin which is subsequently activated to thrombin, and (2) by liberating a thromboplastic substance (thromboplastin) which neutralizes the antithrombin normally present in the blood." Deductions of this sort are helpful not only in supporting the temporary working hypotheses regarding the coagulation process in blood, but also in associating the platelets with some appreciable physiologic function. It is always gratifying to discover some tenable use for compounds or anatomic elements whose part in the economy has remained obscure.

1. Cushing, S. N.: Taking a Profit from Blood, Technical World Magazine, December, 1911.
2. A New Theory of the Coagulation of the Blood, THE JOURNAL A. M. A., Feb. 10, 1912.
3. Bayne-Jones, Stanhope: The Presence of Prothrombin and Thromboplastin in the Blood Platelets, Am. Jour. Physiol., 1912, xxx, 74.

### WHY SOME MANUSCRIPTS ARE RETURNED

The sorrow of an author whose manuscript is returned—deep though it be—cannot be compared to that of the manuscript editor who, without the "justified" enthusiasm of the author, guided merely by the cruel spirit of analysis, stumbles over a "sentence" of this character:

> It is indeed true that in the height of the inflammatory process, during the moist stage Staphylococci are found in the secretion and it is also possible by some trifling traumatism to allow the penetration of Staphylococci into the limp spaces of the cutest and there owing to disintegration of the bacteriol body antitoxins are set free.

The article from which the above was quoted also contained the following remarkable examples of orthography: "persistent skin" (resistant skin), "accatete" (acetate), "a too edge sword," "antipruric," "suborrhic," "a leader" (liter) of water, "Sophlicoccus," "pussular condition." And yet some physicians wonder why their manuscripts are returned!

### VINEGAR AND THE PUBLIC HEALTH

The extent to which confusion is sometimes carried in public health affairs is well illustrated in a recent article on "Vinegar and Vinegar Laws" in the March *Bulletin of the Boston Health Department*. As the writer of the article points out, the value of vinegar lies in its acetic acid content, and the question of the "purity" of vinegar is one of commercial values and not of public health. The purchaser of vinegar naturally wishes to be assured that he is getting his money's worth of acetic acid, but every sanitarian knows that the purchaser's health will not suffer if the vinegar contains only 3 per cent. instead of 4.5 per cent. of acetic acid. So long as the vinegar contains no injurious substance it is quite immaterial whether it is made from cider, molasses or any other wholesome material. The superiority claimed for vinegar made from particular substances is wholly fictitious since vinegar is purchased for the acetic acid it contains and for nothing else. The author of the article cited, who is himself the inspector of milk and vinegar of the Boston Board of Health, proposes in fact a law which forbids the application of any descriptive term to vinegar indicating the substance

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or materials from which the vinegar is made. In this way the temptation to defraud would be eliminated and the public would probably obtain a superior product at a much less cost. In a word, the vinegar issue is not a public health question, but one of commercial honesty. "Much of the time now devoted to the improvement of vinegar laws could with simpler and less legislation be more wisely directed to other channels."

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### A GOOD BEGINNING FOR A NEW STATE

The Democratic party in the new state of New Mexico held its first state convention at Clovis, May 14. One of the first things it did was to adopt the following plank in its platform:

**We believe a healthy, vigorous people to be the greatest asset of a nation. We commend the efforts of Senator Owen to secure greater efficiency in our national health agencies. We believe these public health agencies should be organized into a single national department of public health, and we favor such legislation as will effect this purpose.**

It would be difficult to imagine a better starting-point for a party in a new state than such a declaration of its belief in the supreme importance of public health. The Democratic party in New Mexico has taken a position that will ultimately be that of all intelligent and unselfish citizens.

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## Medical News

### CALIFORNIA

**Pasteur Institute for University.**—The Pasteur Institute for the manufacture of virus to be used in combating rabies is the latest addition to the scientific laboratories of the University of California, Berkeley, which is under the direction of Dr. Wilbur A. Sawyer.

**Alumni Meeting.**—The annual meeting of the Alumni Association of the College of Physicians and Surgeons, San Francisco, was held May 28. The following officers were elected: president, Dr. George W. Goodale; vice-presidents, Drs. H. A. Mager and A. H. White; secretary, Dr. Chas. M. Troppman, and treasurer, Dr. Clarence A. DuPuy.

**Personal.**—Dr. Manuel Fernandez, Pinhole, was seriously injured in an automobile accident recently.——Dr. Chas. Benjamin Hare, San Jose, has been elected secretary of the Santa Clara County Medical Association, vice Dr. McNally, deceased. ——Dr. J. N. Ward has been elected president of the Board of Health of Auburn.——Dr. A. P. O'Brien has been appointed a member of the Board of Health of San Francisco.——Dr. Hugh Logan has been appointed surgeon of the fire department of San Francisco.——Dr. Walter Gavey, Kennett, has been appointed local surgeon of the Southern Pacific system at Red Bluff.——Dr. C. F. Buckley, San Francisco, is reported to be seriously ill with pneumonia at his home.

### COLORADO

**Research Laboratory for Denver.**—A research laboratory is being planned for the National Jewish Hospital for Consumptives at Denver, to be built under the direction of its president, Samuel Grabfelder, and to cost about $100,000. The work of the institution is to be research and study regarding tuberculosis.

**Personal.**—Dr. H. W. Kirby, Georgetown, has been appointed a member of the State Board of Health, vice Dr. B. F. Woody. ——Dr. W. J. Fairfield, Delta, who was believed to have been drowned in the Gunnison River over two years ago, is reported to have been rescued and to have suffered from a lapse of memory and after two years in Alaska, is now said to have returned to Colorado.——Drs. O. D. Westcott and Aubrey Williams have been elected members of the advisory board of the Health Department of Denver.——Dr. J. M. Perkins has been appointed health commissioner of Denver, Dr. Rose Kidd Beere, assistant health commissioner and superintendent of the County Hospital, and Dr. Rudolph Albi, medical inspector in charge of contagious diseases.——Dr. G. F. Wentch, Montrose, recently sustained serious injuries from a runaway horse.—— Drs. Benjamin M. Steinberg and M. Ethel V. Frazer have been appointed county and city physicians of Denver.

### CONNECTICUT

**Babies' Hospital Opened.**—The Babies' Hospital, Hartford, opened for the summer, June 15.

**New Officers.**—Manchester Medical Society: president, Dr. W. R. Tinker; secretary-treasurer, Dr. N. A. Burr.

**State Society Election.**—Connecticut State Medical Society held its one hundred and twentieth annual meeting in New Haven, May 22-23, and elected the following officers: president, Dr. Edward T. Bradstreet, Meriden; vice-presidents, Drs. Frederick Gilnack, Rockville, and Alvin E. Barker, Bethel; secretary, Dr. Wilder Tileston, New Haven; treasurer, Dr. Joseph H. Townsend, New Haven; and delegate to the American Medical Association, Dr. D. Chester Brown, Danbury.

**Personal.**—Dr. H. De Forest Lockwood, Meriden, sailed for Europe, June 8. Dr. Lockwood was recently commissioned first lieutenant, Medical Corps, N. G., Connecticut.——Drs. Herman S. Schultz and Edward F. McGovern have resigned as ambulance surgeons on the staff of the Emergency Hospital, Bridgeport, and Drs. Charles R. Pratt and William H. Curley have been appointed their successors.——Dr. Paul Waterman has been appointed a member of the health commission of Hartford.——Dr. Albert C. Thomas, assistant physician of the Connecticut State Insane Hospital, Middletown, has been appointed superintendent of the New Haven State Hospital, vice Dr. H. T. Summersgill, resigned.——Dr. James E. Stetson, New Haven, sailed for Europe, June 1.

### ILLINOIS

**Personal.**—Dr. Stephen O. Hendrick, Henry, who has been seriously ill with heart trouble, is reported to be in a critical condition.——Dr. W. S. Howell, Winnebago, who has been ill in a sanatorium at Rockford, is reported to be convalescing.

**Annual Meeting of Sanatorium.**—The annual meeting of the Chicago-Winfield Tuberculosis Sanatorium was held in Chicago, May 23. The report showed that the daily average of patients was sixty-nine and one-half and that each had been treated at a daily expense of $1.19. It was announced that a new administration building would be erected during the coming year and that Dr. Albert Polon, of the Montefiore Home, New York City, had been secured as superintendent of the institution.

**Hospital Notes.**—Directors of the Elgin Women's Club have accepted a gift of property valued at $4,000 for Sherman Hospital from George Marshall. The gift will create the Marshall fund in memory of the late Dr. Sarah A. Marshall, the wife, and Newell Marshall, the brother of the donor.——The Ottawa Tuberculosis Colony announces that its new hospital building, especially constructed to apply the open-air treatment to cases of closed and surgical tuberculosis, will be completed by July 1. An industrial department has also been added for patients who cannot afford to pay the rates required for the main sanatorium, and for these a rate of $14 a week has been made. The colony has opened an office in Chicago.

### Chicago

**New Officers.**—Chicago Medical Woman's Club, June 12: president, Dr. Effie L. Lobdell; secretary, Dr. Sadie May Adair. ——Chicago Medical Society, June 18: president, Dr. Jacob Frank; secretary, Dr. P. J. H. Farrell.

**Research Fellowship Funds Donated.**—At the alumni banquet of Northwestern University Medical School, June 10, Dean Edwards announced that a fellowship fund for research work in tuberculosis and infectious diseases has been donated to the institution by James A. Patten, Evanston.

**Personal.**—Dr. Frank T. Andrews underwent an emergency operation for appendicitis at Mercy Hospital, June 1, and is reported to be doing well.——Dr. Theodore B. Sachs has been reappointed a trustee of the Municipal Sanatorium.——Dr. and Mrs. D. A. K. Steele sailed from England, June 14, on their return from a trip around the world.

**Hospital Notes.**—The Lynde Hospital, formerly known as the medical department of Gads Hill Center, was the beneficiary of

the performance at the Cohan-Grand Opera House, June 18.——A building permit has been issued to the Garfield Park Sanitarium for a three-story brick building to be used as a hospital, to cost $3,000.——The Ravenswood Hospital is said to have lost its appeal, in the case for damages in which Mrs. Clara Appell obtained a judgment for $7,500 against the institution on account of alleged injuries received while a patient therein.——The Jane Murdoch Memorial Building of the Presbyterian Hospital was dedicated June 9. The funds for the construction were provided by the will of the late Thomas Murdoch, one-third of the residuary estate of whom was bequeathed to the hospital. The building stands as a memorial to the sister of the testator. It has a maternity department with 34 beds, a children's department with accommodation for 23, five wards each of 10 beds, one four-bed ward, and nine rooms and four three-bed wards in an isolation department, making a total of 132 beds. The hospital also has a sun parlor, open air pavilion and thorough equipment for laboratory work.

## LOUISIANA

**Pure Milk Society Officers Elected.**—At the annual meeting of the Orleans Parish Pure Milk Society, Dr. W. W. Butterworth was reelected president; Dr. L. R. DeBuys was elected vice-president, and Dr. C. H. Rice, secretary-treasurer.

**Unveiling Chaillé Memorial Bust.**—The Chaillé memorial bust in memory of the late distinguished dean of Tulane University was unveiled at the Richardson Memorial Auditorium, the presentation address being made by Dr. Rudolph Matas.

**Railway Surgeons Session.**—The first annual meeting of the Louisiana State Railway Surgeons' Association was held in New Orleans, April 22, and the following officers were elected: president, Dr. H. B. Gessner, New Orleans; vice-presidents, Drs. J. B. Guthrie, New Orleans, S. L. White, Ruston, and H. B. Wilson, Vicksburg, Miss.; secretary, Dr. Joseph D. Martin, New Orleans, and treasurer, Dr. D. W. Kelly, Winnfield.

**Sanatorium News.**—The contract for the construction of St. Frances Sanitarium, Monroe, was awarded, June 5. The building and equipment will cost about $75,000.——A stock company has been incorporated to erect and operate a sanatorium at South Crowley, under charge of Dr. E. M. Ellis. The following physicians appear on the board of directors: Drs. E. M. Ellis, R. B. Raney, W. Hyde, D. D. Mims and M. L. Hoffpauir.

**Personal.**—Dr. Charles A. Borey, New Orleans, is under treatment in Johns Hopkins Hospital, Baltimore.——Dr. G. C. Chandler has been appointed health officer of Shreveport, vice Dr. A. A. Herold, resigned, to accept the appointment of coroner of Caddo Parish.——Dr. J. M. Ledbetter, Shreveport, was recently thrown from his automobile and fractured his shoulder.——Dr. Edward S. Kelly, New Orleans, secretary of the State Board of Health, has resigned.

**Needs of Leper Home.**—The biennial report of the Board of Control of the Lepers' Home shows that the number of inmates has increased from sixty-five to seventy-five. During the past two years thirty-one have been admitted, two have been discharged as cured, fifteen have left the institution and ten have died. The report asks for appropriations to meet present indebtedness, $48,000 for two years' maintenance, $10,000 for a new dining hall and kitchen and $2,000 for laundry building.

**Oppose Control by Tulane.**—A meeting was held recently in New Orleans of physicians connected with the visiting staff of the Charity Hospital, but not connected with the teaching corps of Tulane University, at which an organization was formed to oppose legislation tended to transfer control of the institution to Tulane. Dr. Homer Dupuy was elected president and Dr. L. M. Prevost, secretary.——Members of the Orleans Parish Medical Society of the visiting staff of Charity Hospital have adopted resolutions indorsing the action of the State Medical Society regarding the control of Charity Hospital. These resolutions demand a searching legislative investigation of the system in which the medical work of the hospital is managed.

**Legislation Wanted by Dowling.**—Dr. Oscar D. Dowling, Shreveport, president of the State Board of Health, has made the following recommendations to the legislature: One or more sanitary engineers, for extermination of mosquitoes; establishment of a bureau of vital statistics and demography; sufficient appropriation for the employment of adequate inspection force including general inspectors, food and oil inspectors and qualified veterinarians; establishment of a health, educational and publicity division; revision of food and drug regulations; in cities over 15,000 the establishment of a medical milk commission, under control of the State Board of Health; a child hygiene division; extension of facilities for laboratory work; medical inspection service for the schools jointly with State Education Department; enforcement of laws relative to local boards of health and local health officers.

## MARYLAND

**Personal.**—Dr. Curtis F. Burnam, Baltimore, and V. M. Richards, Washington County, have been appointed members of the board of managers of the Maryland State Tuberculosis Sanatorium.——Dr. John R. Downes, Preston, has been appointed health officer of Caroline County.

### Baltimore

**Remsen's Retirement.**—On the retirement of Dr. Remsen from the presidency of the Johns Hopkins University, his colleagues of the various faculties presented him with a series of resolutions prefaced by eulogistic addresses.

**Welch Entertains Physicians.**—Dr. William H. Welch gave a dinner at the Baltimore Country Club, June 9, to twenty fellow physicians in honor of Surgeon General Torney, U. S. Army, Col. Wm. C. Gorgas, U. S. Army, and Surgeon General Rupert Blue, U. S. P. H. & M.-H. Service.

**Personal.**—Dr. Thomas A. Ashby has been given the honorary degree of LL.D. by Washington and Lee University.——Dr. Charles F. Blake has received the honorary degree of A.M. from the University of Ohio.——Dr. S. J. Crowe sailed for Europe, June 14.——Dr. H. S. Greenbaum sailed for New York from Bremen, June 15.——Loyola College has conferred the honorary degree of LL.D. on Dr. Charles O'Donovan, the degree of A.M. on Dr. Leonard K. Hirshberg and the degree of A.B. on Dr. Emil Novak.

**Faculty Changes.**—The following appointments and promotions in the faculty of the Medical Department of Johns Hopkins University are announced: Dr. Herbert M. Evans, now associate, to be associate professor of anatomy; Dr. Charles R. Essick, now instructor, to be associate in anatomy; Dr. Thomas P. Sprunt, now instructor, to be associate in pathology; Dr. Samuel J. Crowe, now assistant, to be associate in surgery; Dr. Lloyd P. Shippen, now assistant, to be instructor in hygiene and bacteriology; Dr. Henry A. Stephenson, now assistant, to be instructor in obstetrics; Dr. David M. Davis, assistant in pathology; Dr. Henry H. Hazen, assistant in dermatology; Dr. George B. Jenkins, assistant in anatomy; Dr. Roy D. McClure, assistant in surgery; Dr. Holland N. Stevenson, assistant in pathology, and Dr. Everett D. Plass, assistant in obstetrics.

## MINNESOTA

**Asks New State Hospital.**—The State Board of Control will ask the legislature to make an appropriation for a fourth state hospital for the insane, as the hospitals at Rochester, St. Peter and Fergus Falls are overcrowded.

**Hospital for Indians.**—Representative Miller has introduced a bill in congress appropriating $100,000 for the Chippewa Hospital; $85,000 of this to be used for equipment, and $15,000 to be used for maintenance the first year.

**Physicians' Building for Minneapolis.**—Property at Nicollet and Twelfth Streets was recently sold to Mr. Moses Zimmerman, who will improve the site with a building to cost about $150,000 to be used for offices of physicians and surgeons.

**Sanatorium Needs Funds.**—The State Board of Visitors recently examined the State Tuberculosis Sanitarium, Walker, reported that lack of funds made it impossible to fill the institution to its capacity, and recommends that a larger appropriation to this be made.

**To Segregate Communicable Diseases.**—Dr. P. M. Hall, health officer of Minneapolis, has suggested the plan to the Board of Charities and Correction of establishing a number of small hospitals in the vicinity of Hopewell Hospital, in each of which one particular form of communicable disease may be treated.

**Trachoma Spreading Among Whites.**—Trachoma, which has affected the Indians of White Earth Reservation, is now said to be prevalent among the miners of Iron Range. The Hibbing Board of Health reports that among miners of the range are immigrants who have come from localities where the disease is prevalent, and fears that it may spread to the school children.

**Personal.**—Dr. and Mrs. William J. Mayo, Dr. and Mrs. Christopher Graham and Dr. and Mrs. Donald Balfour, Rochester, have returned from Europe.——Dr. and Mrs. Charles H. Mayo, Rochester, sailed for Europe, June 3.——Physicians of

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Red Wing recently gave a farewell banquet in honor of Dr. F. W. Dimmitt, who is about to move to Yoakum, Tex.——Dr. Charles H. Hunter has resigned from the faculty of the University of Minnesota.——Dr. O. F. Lang, Faribault, has resigned as physician to the Minnesota School for the Feeble-Minded.

**Permanent Health Officer at Rochester.**—The offer of the State Board of Health of the State of Minnesota to establish a permanent health officer for Rochester has been accepted by the city council and by the agreement Dr. Charles H. Mayo is to continue as health officer, and the money appropriated will be used to employ an assistant who will give his entire time to the work under the authority of Dr. Mayo. The State Board, Civic League and the City of Rochester each pay one thousand dollars a year toward defraying the expenses of the department.

## MISSOURI

### St. Louis

**Personal.**—Dr. Eugene L. Opie, professor of pathology in Washington University, has been appointed dean of the medical school, vice Dr. George Dock, relieved of this duty at his own request.——Dr. I. D. Kelly has returned from Vienna.

**Hospital News.**—The hospital board has appointed forty-three interns for the city institutions, effective July 1.——The board decided to leave the location of the new hospital for infectious diseases to the municipal assembly and to authorize an ordinance for the hospital between the present city infirmary and the city sanatorium.——A permit was issued June 7 for the erection of the building of the Barnes Hospital to cost $150,000.

## NEW JERSEY

**Pediatric Election.**—The third annual meeting of the New Jersey State Pediatric Society was held in Spring Lake, June 10, and the following officers were elected: president, Dr. Alexander McAlister, Camden; vice-president, Dr. Martin Synnott, Montclair; secretary, Dr. Elmer G. Wherry, Newark, and treasurer, Dr. B. van D. Hedges, Plainfield (reelected).

**Personal.**—Dr. Oliver Grimshaw, Swedesboro, sustained severe injuries by being run over by his automobile which he was cranking.——Dr. C. B. Smith, Washington, was injured in Easton, Pa., June 8, while cranking his automobile.——Dr. William Spickers, Paterson, who was operated on for appendicitis, June 6, in the Paterson General Hospital, is reported to be in a critical condition.——Dr. J. William Hughes has been appointed a member of the City Council of Atlantic City.

## NEW YORK

**For Albany Hospital.**—The sale of flags on Flag Day resulted in a net fund of $13,432 for the building fund of the Maternity Hospital of the Roman Catholic diocese of Albany.

**Fire in Hospital.**—Nurses and orderlies of Flushing Hospital, June 6, put out a fire in the annex of the hospital before firemen reached the institution, and without any panic being caused.

**Home for Sick Babies.**—A home for sick babies is to be maintained by the Visiting Nurses' Association of Syracuse and the plan has the hearty cooperation of the physicians of the city.

**New Officers.**—Medico-Chirurgical Society of Central New York, thirty-third annual meeting held in Utica, June 5: president, Dr. F. C. Watson, Cazenovia; secretary-treasurer, Dr. E. A. Gayde, Utica.

**Hospital for Tonawandas.**—The secretary of the State Charities Aid Association recommends that a hospital be erected, for the use of Tonawanda and North Tonawanda to cost $30,000 and with accommodation for twenty patients.

**Former Health Board Secretary Dies.**—Thomas A. Stewart, for many years secretary of the State Board of Health and afterward a special examiner in the State Comptroller's office, Albany, died at his home in Geneva, June 5, from acute gastritis.

**Personal.**—Dr. P. L. Alden, Hammondsport, put an aeroplane to practical use June 9, to answer an emergency call on the other side of Lake Keuka.——Dr. J. R. Sturtevant, Theresa, is reported to be convalescent.——Dr. M. S. O'Brien, Syracuse, who has been ill for several days, is reported to be convalescent.——Dr. J. W. Conway, Hornell, has sailed for Europe.

### New York City

**Large Sum for Cancer Research.**—A scientist has added $100,000 to the endowment fund of the General Memorial Hospital for the Treatment of Cancer and Incurable Diseases, to be used for the maintenance of twenty free beds for cancer patients.

**New Dispensary.**—The Hospital for Deformities and Joint Diseases announces that $36,500 has been raised toward the construction of the new dispensary building. Jacob H. Schiff and Felix and Paul M. Warburg have each contributed $2,500 toward the fund. The new building will be the third which has been found necessary within the past five years.

**Another Hospital Planned.**—The Federation of Russian-Polish Hebrews of America have purchased a plot of land at One Hundred and Thirteenth Street and Columbus Avenue, on which a hospital will be erected at a cost of $150,000, which will be called the Beth-David Hospital. The association is maintaining a temporary dispensary at Lexington Avenue and One Hundred and Fifteenth Street.

**Hospital Appeals for Funds.**—The Mount Sinai Hospital has issued an appeal for contributions from donors, patrons and members, which states that the expenditures of the institution are more than $440,000 a year and that annual donations and dues amount only to about $130,000. The appeal also asks for contributions toward a fund to be used for the establishment of a convalescent home in the suburbs.

**Guild Plans for Summer.**—St. John's Guild has issued an announcement that its work for the season has begun. The guild's floating hospital, the *Helen Juilliard*, will make the usual daily trips to the seaside home at New Dorp, S. I., where there are accommodations for 360 patients. Tickets are distributed through the Department of Health, the dispensaries, day nurseries and churches, and it is said that no mother with a sick baby is ever turned away.

**Medical College Commencements.**—On June 5, the College of Physicians and Surgeons of Columbia University conferred the degree of doctor of medicine on eighty-five graduates, Dr. Nicholas Murray Butler making the address and bestowing the degrees.——The University and Bellevue Hospital Medical College on the same day graduated a class of eighty students.——The Cornell University Medical College held its commencement exercises June 7, and conferred degrees on eleven students, President Schurman of the University addressing the students and conferring the degrees.

**Typhus Now Reportable.**—The May *Bulletin* of the New York Department of Health quotes from the recently published studies of Doctors Anderson and Goldberger of the United States Public Health and Marine-Hospital Service and from the ensuing discussion which have brought out conclusively that the so-called Brill's disease is a less virulent form of typhus and that the disease is endemic in this city. The Department of Health expresses the opinion that in view of the conclusive evidence as to the true nature of Brill's disease, it would seem wise to discontinue the use of that term. In view of the fact that many physicians are not familiar with the disease the *Bulletin* describes the symptoms and course of this mild form of typhus and reminds the profession that typhus is a reportable disease.

**Personal.**—Dr. A. J. Rongy was tendered a dinner on May 23 in honor of his appointment as attending gynecologist to the Lebanon Hospital.——Dr. Charles McKinley, ambulance surgeon of the Harlem Hospital, was injured in a collision between one of the Harlem Hospital ambulances and a Third Avenue car.——Among those who have sailed for Europe during the past week are: Dr. and Mrs. Eugene W. Candidus, Brooklyn; Dr. Charles H. Jaeger, Dr. and Mrs. P. H. Williams, Dr. and Mrs. H. Holbrook Curtis, Dr. Ellsworth Elliott, Jr., and Dr. and Mrs. Frank Hartly.——Dr. W. E. Joiner, Brooklyn, who recently moved to Seattle, Wash., has been appointed surgeon of the steamship *Minnesota*, which sailed from Seattle, June 18, for Japan, China and the Philippine Islands.——Dr. Isaac S. Hirsch, New York City, sailed for Europe, May 30.

**Urge Need of New York Hospital.**—The Committee on Public Health, Hospitals and Budget of the New York Academy of Medicine has submitted an argument to the Board of Estimate and Apportionment asking that immediate action be taken in the matter of granting permission to use a site acquired some time ago for the erection of a hospital for contagious diseases in the Bronx. In 1911 the Board of Estimate and Apportionment granted an appropriation of $250,000 for the erection of such a hospital, but a protest from property holders in the vicinity has prevented carrying out the proposed plan. The argument of the committee shows that both the Willard Parker Hospital and the Kingston Avenue Hospital, Brooklyn, are overcrowded from December to May and are too

far distant from the Bronx and that such a hospital will not be a menace to those residing in the vicinity.

**New Milk Station System.**—At a recent meeting of the Association of Infant Milk Stations it was proposed to change the name of the various organizations now working together for the purpose of lowering the infant mortality in this city to the Infant Welfare Association. This is to be done in order to indicate the broadened work of the organization, which proposes, in addition to distributing milk and educating mothers, to make the milk station the center for looking after every physical need of the child in the tenements, including hospital accommodations, dispensaries, nurseries, outings and ice distributing agencies. The New York Milk Committee has turned over its milk stations to the Board of Health and will devote its efforts to conducting a campaign of educational publicity. The New York Diet Kitchen Association, one of the agencies cooperating with the Infant Welfare Association, is endeavoring to raise $50,000 in order to assist with the work and has just received a contribution of $700 from one donor. Nathan Straus announces that he will open ten additional milk stations as his part in the work. All of these agencies make their work supplementary to that of the Board of Health and by this system of cooperation avoid any duplication of work.

### Buffalo

**New Officers.**—Buffalo Academy of Medicine, Section on Pathology: president, Dr. Guy L. McCutcheon; secretary, Dr. A. A. Thibaudeau.

**Money for District Nurses.**—The District Nursing Association on June 5 inaugurated a campaign to raise $16,000 for carrying on the work during the coming year.

**Superintendent Chosen for Tuberculosis Hospital.**—Dr. Otto R. Eichel, head of the Tuberculosis Division of the Buffalo Department of Health, was first on the eligible list in the examination recently held for superintendent of the J. N. Adam Memorial Hospital for Incipient Tuberculosis, Perrysburg; Dr. Clarence L. Hyde was second, and Dr. Horace LeGrass was third. The hospital expects to be ready to receive patients in the early autumn.

**Alumni Meeting.**—The thirty-seventh annual meeting of the Alumni Association of the Medical Department of the University of Buffalo was held May 31, and the following officers were elected: president, Dr. Henry C. Buswell, Buffalo; vice-presidents, Drs. William R. Palmer, Johnsonburg, Pa., John A. Stapleton, Rochester, Norman T. Bernam, Buffalo, M. J. Wilson, Warsaw, N. Y., and Julius Richter, Buffalo; secretary, Dr. D. C. McKenney, Buffalo; treasurer, Dr. W. E. Jacobs, Buffalo, and trustee, Dr. Benjamin F. Rogers, Buffalo.

**Personal.**—Dr. Frederick C. Busch has resigned as professor of physiology in the University of Buffalo to accept the position of clinician at the New York Institute for the Study of Malignant Diseases, and has been succeeded by Dr. Frederick H. Pratt.——Dr. Herbert U. Williams has been elected dean of the Medical Department of the University of Buffalo, vice Dr. Mathew D. Mann, resigned.——Dr. DeWitt H. Sherman has succeeded Dr. Eli H. Long as professor of materia medica and therapeutics in the University of Buffalo.——Dr. E. J. Meyer has been elected president of the Board of Managers of the new John H. Pryor Hospital.——Dr. John F. Fairbairn sailed for Europe, May 24.

### NORTH DAKOTA

**Personal.**—Dr. Gordon St. Clair, Glen Ullin, has been appointed a member of the staff of Shipman Hospital, Ely, Minn.——Fire in Minot, May 16, destroyed the offices of Drs. Andrew Carr and E. M. Ransom.

### PENNSYLVANIA

**Contract Awarded for Sanatorium.**—The contract for the last of the buildings at the Cresson State Tuberculosis Sanatorium has been awarded for $61,975. This contract includes twenty cottages, two bath houses, four pavilions and a stable. The institution is expected to be ready to receive patients in September. When the twenty cottages are completed the sanatorium will be able to accommodate 320 patients.

**Memorials.**—At a meeting of the Harrisburg Academy of Medicine, May 31, resolutions were adopted on the death of the late Dr. John Herr Musser, Philadelphia, an honorary fellow of the academy, and copies of the resolutions were directed to be sent to Mrs. Musser.——A memorial is also being prepared by the academy for the late Dr. William Wilson Rutherford, whose portrait was presented to the academy by his daughter some time ago.

**Hospital News.**—The Mid-Valley Hospital, Blakely, was thrown open for inspection, May 30 and 31, and is now open to receive patients. This hospital supplies the need of the thousands of miners in the district lying between Scranton and Carbondale, which has heretofore been without accommodation. The hospital has cost thus far, about $60,000 for building and equipment, all but $18,000 of which has been collected by private subscription.——Ten members of the staff of Sewickley Hospital are said to have resigned, May 30, on account of alleged mismanagement of the institution.

**Personal.**—Drs. Lawrence Litchfield and Frederick H. Rhodes have been made members of the Moral Efficiency Commission of Pittsburgh and will make a study of social conditions in the city with especial reference to vice and to suggest recommendations and remedies.——Dr. J. Donald Iams, Sheraden, has been elected president; Dr. Allan M. Kerr, vice-president, and Dr. F. B. Edmundson, secretary-treasurer of the School Medical Inspectors of Pittsburgh.——Dr. T. A. Brundage, Harford, who has been seriously ill, is reported to be convalescent.——Dr. William Kemmerer, Danielsville, is ill at his home with catarrhal pneumonia.——Dr. J. K. White, New Brighton, is critically ill with cerebral hemorrhage.——Dr. T. C. Fitzsimmons, Waymart, who has been in charge of the State Hospital for Criminal Insane, has been elected permanent medical superintendent of the Institution.——Dr. W. Rowland Davies, Scranton, was operated on for appendicitis in the Lackawanna Hospital, May 25.

### Philadelphia

**Australian Physician in Philadelphia.**—Dr. James N. Barrett, Melbourne, Australia, who is making a tour of the United States, has recently been the guest of Dr. L. Webster Fox at his home in Haverford.

**Fund for Education of Deaf.**—To raise the $250,000 necessary for the proposed Archbishop Ryan Memorial Institute for the Education of the Deaf, the president of the association has addressed a letter to every adult Roman Catholic in Philadelphia asking for a contribution of at least one day's wage or income for this charity.

**Neighborhood House to Open Roof Garden.**—The Southwark Neighborhood House at Front and Ellsworth Streets, in the heart of a most congested district, plans, if sufficient funds can be obtained, to open a roof garden as a sleeping place for ailing babies and their mothers. At present, this institution runs a day nursery on its roof, and has a modified milk station.

**Annual Outing of Physicians.**—Three hundred members of the Philadelphia Clinical Association were present at the annual outing held in Washington Park, June 13. Dr. Edward S. Saylor was in charge of the lawn tennis contest; Dr. Louis H. Jacob was in charge of the baseball game; Dr. E. K. Mitchell had charge of the bowling and shuffle-board contest, and Dr. J. O. Arnold was in charge of the rifle contest.

**Personal.**—Dr. Melvin M. Franklin was given the degree of LL.D. at Villanova College, recently.——Dr. John Albert Kolmer has been awarded the Philadelphia Pediatric Society's prize of $100 for his essay entitled "Studies in Diphtheria."——Dr. John G. Clark, Robert G. LeConte, George E. de Schweintz and R. Norton Downs have sailed for Europe.——Dr. Charles Henry Liebert is reported to be seriously ill with pneumonia.

**Physical Education.**—In connection with the School of the University of Pennsylvania, a course in the theory and practice of physical education is being held at the University gymnasium. In addition to the technical subjects designed especially for the training of teachers, courses are held in the practice of elementary and advanced gymnastics, dancing and swimming. The school will be in charge of the instructor in gymnastics of the University of Pennsylvania, with associates as special instructors.

**Pier Hospitals Opened.**—Dr. Joseph S. Neff, Director of Public Health and Charities, opened the recreation piers at the foot of Chestnut and Race Streets, June 15. Many children visited the playground, but there were no patients for the hospital. At the present time there is only $2,500 available for the maintenance of these hospitals, which is hardly enough to keep them open until the middle of July. Last year $5,000 was appropriated by Councils for their use. A number of improvements have been made in the accommodations of the Race Street Pier, which last year had room for only thirty-seven babies, while now eighty can be accommodated.

**Small-Pox Case Causes Extensive Quarantine.**—In addition to establishing a rigid quarantine for two weeks at the Phila-

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delphia General Hospital, the Bureau of Health, June 12, went over the route taken by Rufus Farrer, a small-pox patient admitted to the Philadelphia General Hospital. He stayed on a farm at West Chester when he complained of feeling ill, then went to the city on a trolley car, stopping at a Lombard Street house. Every patient at the hospital has been vaccinated and forty persons in the Lombard Street house also. The State Health Commissioner was also notified and has taken steps to quarantine the farm at West Chester.

**Babies' Hospital Opened.**—The Babies' Hospital, organized three years ago by physicians for the free care of infants under three years of age afflicted with enteritis, opened at Wynnefield, in Fairmount Park, June 17. This hospital is entirely independent of all other institutions and gets no support from the city, and its capacity is limited only by the extent of the private contributions. At present the capacity is about seventy-five but there is room for twice that number, were money sufficient for the care and treatment. This season several additions have been made: several portable shelters on the lawns for the use of mothers, called to the hospital when the babies need their presence; a special diet kitchen has been arranged and two trained nurses installed; a system has also been arranged under which discharged patients will be watched over by visiting nurses after they have returned to their homes. This has been done with the cooperation of Dr. Joseph S. Neff, Director of Public Health and Charities. Dr. John F. Sinclair is treasurer of the body of physicians who organized the hospital independently and contributed largely to its maintenance.

## VIRGINIA

**Bell Day a Success.**—The total receipts of "Bell Day" for the benefit of the Virginia Home for Incurables, Richmond, are said to have exceeded $3,500.

**Small-Pox in Hospital.**—Small-pox of mild type is reported to have broken out in the Southwestern State Hospital, Marion, where fifty cases have been reported.

**New Building Opened.**—The new building of the University College of Medicine, Richmond, was opened for public inspection, May 22. A tablet was also unveiled by the Confederate Memorial Literary Society, in memorial of the fact that the residence of Alexander H. Stephens, vice-president of the Confederacy, stood on the site of the college building.

**Personal.**—Dr. Ennion G. Williams, Richmond, has been reappointed State Health Commissioner of Virginia.——Dr. H Norton Mason, Richmond, has been commissioned as captain of M. C. Va. Vol., and assigned to duty with the Richmond Light Infantry Blues.——Dr. Joseph Bear has been appointed resident physician in the Memorial Hospital, Richmond.——Dr. J. J. Hulcher has resigned as ambulance surgeon at the city hospital and will practice in Richmond.

## GENERAL

**American Sanatorium Association.**—The American Sanatorium Association held its seventh spring meeting at Washington, D. C., May 29. The subjects discussed were: sanatorium nursing, sanatorium discipline, medical records, amusements and entertainments. Committee reports were presented on nomenclature, a minimum standard of clinical laboratory work and routine medical work.

**Neurologists Hold Meeting.**—At the annual meeting of the American Neurological Association held in Boston, May 30-June 1, the following officers were elected: president, Dr. Pearce Bailey, New York City; vice-presidents, Drs. Philip Zenner, Cincinnati, and J. W. Courtney, Boston; secretary-treasurer, Dr. Alfred Reginald Allen, Philadelphia (reelected), and directors of council, Drs. W. N. Bullard, Boston, Charles W. Burr and William G. Spiller, Philadelphia.

**National Society of Anesthetists.**—On June 6, at Atlantic City, during the meeting of the American Medical Association, and following a symposium on anesthesia, the National Society of Anesthetists was organized, Professor Yandell Henderson of Yale, chairman of the commission on anesthesia of the American Medical Association, occupying the chair. Those assembled for the symposium, acting as a committee of the whole, proceeded to organization and elected the following officers for the year 1912-1913: president, James T. Gwathmey, New York; vice-presidents, Charles K. Teter, Cleveland, F. H. McMeechan, Cincinnati, Yandell Henderson, New Haven; secretary, William C. Woolsey, 88 Lafayette Avenue, Brooklyn; treasurer, Harold A. Sanders, Brooklyn. The constitution and by-laws were ordered to be drawn by the executive committee and submitted for adoption to the society at its next meeting. The society calls on all those who are actively interested in this work to join its ranks, and assist in developing the subject of anesthesia to greater perfection and more uniform safety.

**Association for the Study of Epilepsy.**—The National Association for the Study of Epilepsy and the Care and Treatment of Epileptics, held its eleventh annual meeting at Vineland, N. J., in connection with that of the American Association for the Study of the Feeble-Minded. The association voted to accept the periodical *Epilepsia* as its official organ and elected the following officers: president, Mr. W. C. Graves, Chicago; vice-presidents, Drs. A. S. Priddy, Lynchburg, Va., and H. A. Weeks; secretary-treasurer, Dr. J. T. Munson, Sonyea, N. Y., and chairman of the executive committee, Dr. J. M. Murdock, Polk, Pa.

**Bequests and Donations.**—The following bequests and donations are announced:

Western Reserve University, Cleveland, has completed its endowment fund of $1,000,000 for the medical school, $250,000 of which was contributed by John D. Rockefeller.

Presbyterian Hospital, New York City, $25,000, by the will of Mrs. Bella Hiden.

Jefferson and Howard hospitals and Hospital for Diseases of the Stomach, Philadelphia, each $5,000, by the will of the Countess Clara Roberts Galli.

Hebrew Charities of Philadelphia, the income of a trust fund of $75,000, and non-Hebrew charities of the city, the income of a trust fund of $15,000, by the will of the late Samuel Kohn.

**New Honors to Colonel Gorgas.**—In presenting Col. William C. Gorgas, M.C., U. S. Army, for the honorary degree of doctor of laws at the commencement exercises of Johns Hopkins University, June 11, Dr. William H. Welch made the following remarks: "In behalf of the Academic Council I have the honor to present for the honorary degree of Doctor of Laws, Dr. William Crawford Gorgas, Colonel in the Medical Corps of the United States Army, member of the Isthmian Canal Commission and chief sanitary officer of the Isthmian Canal Zone, formerly president of the American Medical Association, physician and sanitarian of the highest eminence, who by his conquests of pestilential diseases has rendered signal service to his profession, to his country and to the world. With high administrative capacity and with full command of the resources of sanitary science Colonel Gorgas has given to the world the most complete and impressive demonstration in medical history of the accuracy and the life-saving power of our knowledge concerning the causation and mode of spread of certain dreaded epidemic and endemic diseases. He it was who, by application of the discoveries of Major Reed and his colleagues of the Army Yellow Fever Commission, was mainly instrumental in freeing Cuba of yellow fever, and he it is who, in spite of obstacles and embarrassments, has made the construction of the Isthmian Canal possible without serious loss of life or incapacity from disease—a triumph of preventive medicine not surpassed in importance and significance by the achievements of the engineer. In the conquest of science over disease, in the saving of untold thousands of human lives and human treasure, in the protection of our shores from the once ever-threatening scourge of yellow fever, in the reclamation to civilization of tropical lands—in results such as these are to be found the monuments of our laureate, his victories of peace, to which this university now pays tribute by such honor as it can bestow."

## FOREIGN

**International Congress of Comparative Pathology.**—The first international congress of this kind is to convene at Paris, October 17 to 23 of this year. M. Grollet, rue Villejust 42, Paris, France, is the secretary general.

**Other Deaths Abroad.**—In addition to those mentioned elsewhere, the profession has lost recently Dr. E. Lambotte, aged 56, professor of surgery at the university of Brussels and former president of the Société Médico-Chirurgicale du Brabant, member of the board of health of his province, leader in the organization of the profession in Belgium, and honorary member of the English College of Surgeons. Oxford also conferred an honorary degree on him. He was a pioneer in several lines of surgical work. His friends claim the priority for him of the button for entero-anastomosis (*Annales de la Société Médico-Chirurgicale du Brabant*, 1888), radical treatment of gastric ulcer (1894), intravesical segregation of the urine, and insufflation of the lungs (1904).——Dr. J. J. Petersen, professor of history of medicine at the university of Copenhagen, and author of important historical works, has died, aged 71.

## LONDON LETTER

*(From Our Regular Correspondent)*

LONDON, June 1, 1912.

### Extension of the London School of Tropical Medicine

The importance of the work done by the London School of Tropical Medicine has been shown from time to time in previous letters to THE JOURNAL. As the school and hospital have now become too small for the increasing demands made on them, it has been decided to extend them. For this purpose $500,000 will be required and its collection has been begun. The laboratory accommodation will be increased so as to provide room for 100 students; at present the capacity is only for fifty-five. Fifteen more bedrooms will also be provided for students. The $500,000 will be distributed under four heads: endowment, new buildings, research and the provision of a nursing home for patients suffering from tropical diseases. There is a large number of government officers, clerks, foremen, etc., who require treatment for tropical disease by specialists, but are unable to pay the fees of an ordinary nursing home. Eight beds are at present available for this class of patients but they are insufficient. The charges will vary from $5 to $15 a week according to the patient's means. A munificent bequest of $50,000 by Lord Wandsworth for medical research has been allocated by his trustee for research in tropical medicine. It will take the form of a research scholarship in tropical medicine which will be administered by the London School of Tropical Medicine. Under the terms of the trust a preference is to be shown to British subjects. The tenure is to be for two years with a year's possible extension. Failing a suitable candidate the school committee may use the current revenue of the scholarship for forwarding some definite object of research in tropical medicine. The scholar is to present a report of his work annually, not later than two months after the expiration of each year of his holding the scholarship. In the event of his proving unsatisfactory his holding of the scholarship will be terminated.

### Foundation of a Research Hospital at Cambridge

Some five years ago a committee of some of the leaders of the profession—Sir Clifford Allbutt, Sir William Osler, Sir Jonathan Hutchinson, Sir Victor Horsley and others—was formed for the study of special diseases. The object was to investigate maladies which, although not immediately fatal to life, incapacitate the sufferer from active work and which in consequence of their chronicity cannot be treated for long periods and sufficiently investigated in general hospitals. The first disease taken up was rheumatoid arthritis. A house in Cambridge was used as a small hospital in which the most modern equipment was provided for investigation, and in which sufferers from the disease were treated. Already some 4,000 cases of rheumatoid arthritis have been carefully recorded, observed, photographed and chemically analyzed. A small hospital called The Research Hospital has now been built and thoroughly equipped. It has been opened by Dr. R. C. Brown, of Preston, to whose munificence it is largely due. It is in the Georgian style and is delightfully situated at a little distance from the town. On the ground floor is a consulting-room and library, three research rooms, *x*-ray apparatus and dark room. On the first floor are four wards, balconies for the patients, sisters' room, bath-rooms, etc.

### Action of a Clerk Against His Employers on the Allegation That He Contracted Tuberculosis in an Insanitary Office

A curious and apparently unprecedented case has been tried, in which a clerk sued his employers for damages, alleging that he had contracted phthisis through their neglect to provide proper accommodation in the room in which he worked, or, in the alternative, through allowing the room to be overcrowded. He had been employed in a large store since 1900. He worked for five years in the trading office and was then transferred to the deposit office, a room 8 feet high with a calculated cubic space of 166 cubic feet for each clerk. There was one window and about fifty clerks were engaged in the room at the same time. It was alleged that the office was dangerous to health and a nuisance, within the meaning of the Public Health Act. On the other hand, the employers maintained that they were under no duty to provide any particular kind of accommodation for their clerks. They further alleged that even if the accommodation was disagreeable or unsuitable the plaintiff was under no obligation to remain in their service. Dr. Leonard Hill gave evidence to the effect that the ventilation and general conditions of the room were satisfactory and that the contraction of phthisis by the plaintiff was not due to any neglect on the part of the defendant. The judge after summing up put the following questions to the jury which were answered as indicated: 1. Were the conditions of the office injurious to the health of the persons employed in it? Yes. 2. Were they so to the knowledge of the defendants? No. 3. Was the office so overcrowded as to be injurious or dangerous to the health of the inmates? Yes. 4. Was the plaintiff in consequence of the conditions prevailing in the office disabled from following his employment? No. 5. Did the plaintiff agree to incur the risk of continuing his employment in the office? Yes. On these findings judgment was given for the defendants.

### The Tropical Diseases Bureau

The reports of the Sleeping-Sickness Bureau, established by the government for the purpose of collecting and diffusing information on this deadly disease, have been referred to from time to time in THE JOURNAL. It originated in the International Conference on Sleeping-Sickness held in London in 1907 and again in 1908 to concert measures for the control of the disease, which was spreading rapidly in tropical Africa. The bureau has performed most useful work. It has issued thirty-six numbers of a bulletin, containing an account of current work in the field and laboratory on sleeping-sickness and other diseases due to trypanosomes, maps of the distribution of sleeping-sickness and the tsetse flies, an exhaustive bibliography, a popular pamphlet on the means of prevention of sleeping-sickness, and more recently, bulletins on kala-azar. These publications have had a wide circulation. Of the monthly bulletin 1,100 copies are issued, of which about half go to Africa. The bureau has gradually collected a library containing 360 volumes and 1,500 pamphlets, most of which relate to trypanosome diseases. It has initiated the despatch of several expeditions to investigate sleeping-sickness in tropical Africa and has supplied information to many inquirers. It soon became evident that what was being done for sleeping-sickness could be done for tropical diseases generally. Physicians in the tropics are unable to consult the numerous papers published in many languages all over the world. Even in London few have time to read, much less digest, the vast mass of new literature on tropical diseases. Arrangements have now been made to expand the bureau, which in future will be known as the Tropical Diseases Bureau. This will entail increased expenditure, the funds for which will be found by the imperial government, the Indian government, the Sudan government, the Union of South Africa, Ceylon, the Federated Malay States, Southern Nigeria, the Gold Coast, Sierra Leone, the Gambia, Fiji, Trinidad and Jamaica. The annual available sum is approximately $15,000. The bureau will deal with all exotic diseases prevalent in tropical and subtropical regions and will publish at frequent intervals a tropical diseases bulletin. The director will have the help of an assistant director and a number of experts, who will be responsible for the different subjects and will furnish for the bulletin authoritative reviews and summaries of published papers. Thus the most recent researches on every tropical disease in every country, new methods of treatment, improved means of prevention will quickly become available for the remote worker in the tropics. The tropical diseases of animals will be treated in a separate publication. The committee includes such well-known authorities as Sir Patrick Manson, Sir David Bruce, Sir William Leishman and Sir J. Rose Bradford. Veterinary science will be represented by Sir John Macfadyean and Mr. Stewart Stockman. The bulletin will be supplied free to medical and veterinary officers of India and the subscribing colonies; to others it will be sold. The present library in which current files of all the journals of tropical medicine are to be found forms the nucleus of a good tropical diseases library. It is expected to grow rapidly and to become of great value to medical officers home on leave from the tropics.

### The Care of the Feeble-Minded

Though ample legislation exists with regard to the insane, the feeble-minded whose mental condition is not so bad as to warrant certification for detention in an asylum have received little attention from the state. A bill on the subject has now been introduced by the government. It is estimated that in England and Wales, with a population of 32,500,000, there are about 150,000 mentally defective persons, apart from certified lunatics. Of these, nearly one half are urgently in need of provision, either in their own interests or for the public safety. There are numbers of mentally defective persons whose training is neglected, over whom no sufficient control is exerted and whose wayward and irresponsible lives are productive of crime, injury to themselves and others and of expenditure wasteful to

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the community and to individual families. In some localities a "permissive" system of public education is available for a limited section of mentally defective children, but is supplemented by no subsequent provision or control and is consequently often misdirected and unserviceable. Many are committed to prisons for repeated offenses, which, being the manifestations of a permanent defect of mind, there is no hope of repressing. A royal commission was appointed in 1904 to investigate the problem of the feeble-minded, and reported in 1908. It suggested the creation of a system by which the mentally defective should at an early age be brought into touch with some friendly authority, trained and, as far as need be, supervised during their lives, in cooperation with their relatives, when that is to their advantage, or, when desirable, detained and treated in some measure as wards of the state. The problem has received a good deal of public attention and such associations as the Charity Organization Society and the Eugenics Education Society have been active in the dissemination of knowledge and the suggestion of remedies. The bill mentioned above sets up a body of commissioners (not to exceed six, of whom one at least must be a woman) to be a central authority for the control of the feeble-minded. They will coordinate and supervise the administration of local authorities, certify, supervise and inspect institutions for defectives and provide institutions for defectives of criminal propensities. The local authorities will be under an obligation to deal with all defectives in their districts. Possibly, in the future, the lunacy department may be amalgamated with the board of commissioners now set up, so that there will be but one central authority for all forms of mental derangement. It is not proposed to interfere with the feeble-minded who are properly cared for in their own homes, but with the following classes: (1) those who are found wandering about neglected or cruelly treated; (2) those who commit crimes; (3) those who are habitual drunkards; (4) children discharged at the age of sixteen from schools for detectives; (5) those who in the interests of the community should be deprived of the opportunity of procreation. The following are deemed to be defectives within the meaning of the act: (a) idiots, i. e., persons so defective from birth or an early age that they cannot guard themselves against common physical dangers; (b) imbeciles, i. e., persons who can guard themselves against physical dangers, but who are rendered incapable of earning their living by congenital mental defect; (c) feeble-minded persons, i. e., those who are capable of earning their living under favorable circumstances but incapable of competing with their fellows or of managing their affairs with ordinary prudence; (d) moral imbeciles, i. e., persons who from an early age display some mental defect coupled with vicious or criminal propensities on which punishment has little or no deterrent effect; (e) mentally infirm persons, i. e., those who through mental infirmity arising from age or the decay of their faculties are incapable of managing themselves or their affairs.

## PARIS LETTER

*(From Our Regular Correspondent)*

PARIS, MAY 31, 1912.

### Statistics on the French Population in 1911

The *Journal Officiel* has recently published very discouraging statistics on the French population in 1911. In 1911, there was an excess of 34,869 deaths while the year before there was an excess of 71,418 births. This difference is due, on one side, to the diminution of births (742,114 infants reported living in 1911 against 774,390 in 1910) and, on the other side, to the increase in the number of deaths (74,011 greater in 1911 than in 1910). The deaths have been more numerous in 1911 than in 1910 in almost all the departments. In proportion to the population, the Norman departments, as in the preceding years, furnished the greatest mortality. The notable increase in the proportional number of deaths in France as compared with many other countries is because France is one of the countries in which there are the greatest number of aged people and chiefly because of the small birth-rate of recent years.

Although the birth-rate is low, France is among the countries in which the number of marriages is relatively large. In 1911, 307,788 marriages were registered. The constantly increasing number of divorces reached 13,058, slightly more than in 1910.

The birth-rate is low in many countries at the present time, but in no country is it so low as in France. Among the many measures suggested to check this increasing depopulation, the most recent is the proposal which M. Messimy, former minister of war, has made to the bureau of the chamber of deputies. M. Messimy believes that a premium at the birth of every child born of the same mother, reckoning from the fourth, would increase the number of births. This premium would be $100 (500 francs) of which one-half would be paid to the mother at the birth of the child and the other half deposited in the national pay-office for pensions, in order to insure her an income from it during life. The mother could, however, collect the sum at once, or devote it to assure her self a subsequent pension, which, in this case, would naturally be much greater. In order to meet the expenses which the premium of 500 francs or subsequent annual income would involve, M. Messimy proposes either to resort, entirely or partially, to the regular budget-resources or to place a special tax on bachelors as well as on heads of families without children or having only one child.

### The Abuse of Flour as a Food for Infants

In the meeting of the *Academie de Médecine*, May 28, Dr. Rosseau-Saint-Phillippe, physician of the hospitals of Bordeaux, urged the necessity of prolonging breast-nursing and the artificial bottle-nursing. The addition of flour, with which the new feeding is started, should be made at the proper time, with moderation and with prudence. These flours are not, indeed, without some inconvenience; they ferment, and therapeutic artifices become expedient to aid their digestion and absorption. The chief danger of flour-foods, used unseasonably and improperly, is constipation. It would be desirable if flour intended as a food for infants were prepared aseptically and kept in cases with daily amounts measured out. The normal growth and health of the child is not proved by scales and weight alone. There are other important points which the physician alone can interpret; also the bringing-up of the child, to whatever class he belongs, ought to be entirely in the hands of the physician. The tendency of many parents to "push" the child's weight should be counteracted. The most healthy child is not the one who eats the most, but the one who eats the best. On the whole, the second alimentation of infancy, possibly less dangerous than the first, is no less important, and the child of from one to two years should be watched and directed almost as carefully as the infant from one day to a year.

### Instruction in Medical Ethics

The Congrès des praticiens, held at Paris and at Lille, has voted that instruction in deontology be requested in all the medical colleges and schools. Up to the present time this has remained a dead letter. But Dr. Lacassagne, professor of forensic medicine in the Faculté de médecine de Lyon, has recently published the outline of a course in deontology in twelve lectures which he will give very soon. The first lecture will be devoted to the duties of physicians toward society; the recent social laws (assistance for the aged, the infirm and the incurable; inspection of children receiving charitable protection and assistance; societies of mutual aid; free choice of the physician; fees for visits, subscriptions, contract). The second lecture will treat of the duties of the physicians and medical students toward the sick (visits, consultations and operations). The subsequent lectures will deal with medical secrecy; the duties of physicians toward their confrères and their relations with dentists, pharmacists, midwives, nurses and assistants; the rights of physicians; the methods of defense and protection of physicians (medical syndicates, etc.).

## BERLIN LETTER

*(From Our Regular Correspondent)*

BERLIN, May 31, 1912.

### Personal

Professor Dürck, until a short time ago director of the pathologic institute at Jena and for the last few months prosector of the pathologic institute of a municipal hospital in Munich, has assumed the direction of the pathologic institute at Rio de Janeiro.

### The Emperor's Fresh-Air Home for Poor Children

In his effort to give evidence of his patriotic care for the lower classes, especially the laborers, the emperor recently decreed that a convalescent home *(Erholungsheim)* for needy children of the working classes should be erected on the coast of the Baltic Sea. The daughter of the mayor of Berlin, who has done excellent service in philanthropy, has undertaken the establishment of the home. In all, three buildings are to be erected, each of which will accommodate

fifty children. It is planned to care for about 800 children in the home yearly. (A cabled despatch in the newspapers states that although the emperor is interested in many charities, this is the first enterprise for children in which he has taken the entire initiative and provided all the funds from his own private purse.)

### Exposition of Hygiene at Stuttgart

The authorities at Stuttgart are planning to have an exposition of hygiene in 1914, and have selected for the preparation and conduct of the exposition Dr. Ingelfinger, the creator of the popular department "Der Mensch" (Man) at the Dresden International hygiene exposition which excited great interest.

### Association of Specialists in Digestive and Metabolic Diseases

May 27 a meeting for organization of specialists in digestive and metabolic diseases was held at Hamburg, in which seventy German specialists participated. It was determined to hold such meetings yearly but it was expressly stated that no separation from the congress for internal medicine is intended. Ewald of Berlin, Schmidt of Halle, Boas of Berlin, Weintraud of Wiesbaden, Starck of Carlsruhe and Pariser of Homburg were selected as the first executive committee. The first scientific meeting is to be held after the annual session of the association of scientists *(Naturforscherkongress)* in September, 1913, at Homburg, and will continue two days. Two main addresses from the field of pathology of metabolism in diseases of digestion were provided for.

### Memorial for Robert Koch at Tokyo

A memorial service for Robert Koch was recently held at Tokyo. In the ceremony, which took place in the temple dedicated in honor of Koch by Kitasato, and which conformed to the Shinto ritual, the widow of Koch, the German ambassador, and many scientists participated. (Shintoism is the primitive cult of the Japanese, and in its essence is a species of ancestor-worship.)

### Influence of Housing Conditions on the Origin of Rickets

At the May meeting of the Society of Social Medicine, a Berlin physician, Dr. G. Levy, made some statements regarding the relations between overcrowding and rickets, which are of interest. Among 1,000 children investigated by the speaker, a family of three to eight persons occupied a single room as living and sleeping room and kitchen in fifty-one cases, while in thirty-five cases three to twelve persons lived in two rooms, of which one was also used as the kitchen; in 532 cases, from two to ten persons occupied an apartment of two rooms, one of which was used solely as the kitchen, and in 350 cases from two to thirteen persons lived in apartments of two rooms and a kitchen. He concludes from his statistics that the frequency and severity of rickets increases in proportion to the number of persons occupying the rooms. It is, therefore, he asserted, the serious duty of the state to regulate by legal means the hygiene of dwellings by obligatory inspection of dwellings, in view of the insufficient care exercised in this matter, and in view of the important relations between overcrowding and development not only of rickets, but also of tuberculosis and with infant mortality. Levy declared that, judging from the experience gained in the oversight of tuberculosis, women would seem to be especially well suited for the inspection of dwellings, since they can exercise a skilled oversight over the hygiene of the home and can exert a better influence on the housewife. The national health insurance societies should also, he said, be required to provide funds for the building of sanitary small dwellings at a moderate rate of interest.

In the very lively discussion which followed this paper, the majority sustained the speaker in his position regarding the relation of housing conditions and rachitis, but others took the stand that this disease depends more on heredity and a certain constitutional taint than on bad housing conditions.

## VIENNA LETTER

*(From Our Regular Correspondent)*

VIENNA, May 31, 1912.

### Definition of Medical Practice

As no valid law in this country strictly defines the meaning of medical practice, thus giving free rein to quackery in a high degree, the Union of Medical Councils (Aertztekammertag) has adopted the following definition, which is being suggested to the government as covering the problem and which will appear in the "Health Act" now in consideration: "Medical practice in the meaning of the law is every act which requires the possession of a medical diploma of doctor of medicine. It comprises not only the art of healing, i. e., the application of the results of medical science on the human body by a doctor of medicine, but also all the doings of a medical expert, the prophylactic actions of medical men for the purpose of prevention of disease, the teaching of medical science (anatomy, physiology), the opening and the embalming of dead bodies, the experiments of bacteriologic chemistry and on living bodies as well as vivisection and animal experimentation for the purpose of ascertaining a diagnosis, and the writing of medical books." The ministry will have to decide, in cooperation with the board of health and the medical councils, in case any other action or dealings should in the future be considered doubtful in its nature, whether such dealing belongs to the realm of medical practice. Laymen will be permitted to perform medical acts only in exceptional cases and then only under the supervision and responsibility of medical men; but in urgent cases—*periculum in mora*—in which medical help is needed at once, a layman may do medical acts.

### Foot-and-Mouth Disease in Austria Extinct

The public was informed recently, by a report of the ministry of agriculture, that an epidemic of foot-and-mouth disease, which raged in this country for over two years, has been finally suppressed. More than 30 per cent. of all the cattle had been affected and the mortality was high. Another disagreeable feature was the necessity of quarantining all the cattle where a case had appeared. Therefore, the largest part of the Austrian and also the Hungarian cattle had to be declared unfit for human use. The result was a scarcity of meat with the usual rise of prices, as the existing laws do not permit the importation of living cattle or meat. In previous letters it has been stated that this was one of the reasons responsible for the falling rate of meat consumption (per head) in Vienna. In spite of the extent of the epidemic among cattle, only very few instances of human mouth-and-foot disease were observed. In those cases in which diagnosis was verified, preferably by the opinion of experienced veterinary surgeons, the symptoms were general malaise, with eruptions on the mucous membranes of the mouth and upper digestive tract, and pyrexia, lasting from five to twelve days. Rashes and vesiculæ on the hands, fingers and forearms, sometimes also a general erythema were seen usually after the fourth day. In some cases consumption of milk and butter from infected dairies could be proved, although it could not be stated positively that this was the only method of infection in these instances. No death among human patients was due to this disease, although the illness at times was very severe.

### Hypnotic Experiments in Court

Recently two criminal cases were heard in the Vienna chief court of justice, in which the accused persons pleaded "not guilty," for they pretended to have acted under the hypnotic influence of unknown persons. In the course of hearing, the counsel for the accused in the first case asked the medical attendant of this man to show the court how susceptible the accused was to hypnotic experiments. Dr. Weiner, a specialist in neurology and psychology, forthwith hypnotized the man and, to the amazement and horror of the lay audience, the prisoner, a man charged with forgery of documents relating to his alleged nobility, proceeded to do whatever he was bidden by the doctor. The experiment was quickly discontinued and the physicians of the court declared that the prisoner was not really under hypnotic influence, for some cardinal points of this condition were not present. In another case, when a man had set on fire the wood-store of a large railway company a few months ago and thus nearly burned a whole district of Vienna, the accused also pleaded hypnotic unconsciousness. It appeared that years ago he had really been hypnotized several times by a man who held public exhibitions, and that the prisoner had done all sorts of strange things when under the influence of any will stronger than his own. The hypnotic experiments to which he had been subjected were also narrated to the court, but no experiment was made as the court disapproved of it. In both instances, however, judgment was given against the accused persons, as the judges were satisfied that the offenses were committed by the prisoners of their own accord. Much discussion followed the occurrences and among physicians the possibility of hypnotic crimes was admitted. The general opinion among lawyers is not yet favorable to this admission. But once doubt has been aroused, it may be safely assumed that the problem will not be allowed to rest until it is settled.

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## Miscellany

**Diagnosis of Gastric Cancer.**—The conclusions of C. Klieneberger's monograph on this subject are rather pessimistic (*Sammlung klinischer Vorträge*, Nos. 652-3). He says that an early diagnosis is usually out of the question at present; gastroscopy and serology still fail us. The patients come to the surgeon generally with the cancer in an advanced stage after a long latent period or after they have long been under treatment on a mistaken diagnosis. An exploratory laparotomy, not for diagnosis but to determine the best technic for removal of the growth, offers, he declares, the best prospects for a cure to date. Even at the best, however, the mortality of an exploratory laparotomy is still 4 per cent.; the mortality of resection—the only radical operation—ranges from 15 to 40 per cent., and the operative mortality of a palliative gastroenterostomy is still higher. Only from a tenth to a third of those who survive the operation have a chance of escaping recurrence, although the operation permits a somewhat longer survival. Klieneberger's own experience includes 421 cases of gastric cancer. The average age of the male patients was 51½ and of the women 49¾, but thirty-eight men and ten women were under 40. One woman of 28 and four men between 25 and 29 had inoperable gastric cancer. Trauma seemed to have been a factor in six cases and in eighteen one parent had had cancer and in ten cases a brother or sister, thus showing a hereditary tendency in 6⅔ per cent. In 6 per cent. there was a history of old hemorrhage suggesting an ulcer, and in 16 per cent. the patients had been treated for stomach disturbances, pains, vomiting, etc., or a "weak stomach." None of the new tests for cancer is absolutely reliable, but in connection with other findings may prove instructive, examining the stools for occult blood, applying also the Salomon test, roentgenoscopy, analyzing the formed elements in the blood and examining the urine and stomach content. A palpable tumor is not a contra-indication to operative measures except that tumors in the lesser curvature offer less favorable prospects. In dubious cases fluctuation in the temperature may point to a gastric cancer. The temperature ranged above normal at times in 195 of his cases. Glandular metastasis was evident in 8 per cent. and metastasis elsewhere, in rectum, skin, pleura or peritoneum, in 25 per cent. A tumor was evident in over 50 per cent. of the total cases. In only 41 cases did an operation offer a chance for success, and resection was done in seven of these; two patients died soon after the operation and three had recurrence after eighteen months; two are still in good health to date (over a year).

**Treatment of Acute Effusion in the Knee.**—Kendirdjy has applied in seven cases the method which Willems found so successful in thirty-four cases of traumatic hemarthrosis or acute hydrarthrosis. The knee is painted with iodin and the fluid is withdrawn by pucture under local anesthesia of the spot where the needle is to be inserted. The puncture hole is painted anew with iodin and a light protecting dressing applied and the patient gets up from the table and begins to walk at once. He is instructed to exercise the joint, walking half an hour the first day and lengthening the walks each day, with exercises to work the triceps and prevent atrophy of it. Massage may also be useful as an adjuvant. In one case the patient was not seen until the fifth day after the hemarthrosis had developed, and although perfect function was restored yet the triceps a month later showed a little atrophy. Kendirdjy's article on the subject was published in the *Presse Médicale Belge*, 1912, lxiv, 315.

**No One Can Be Compelled to Submit to an Operation.**—A workman at Basel, Switzerland, was incapacitated by an industrial accident and the court awarded him the usual proportional pension. The proprietor of the industrial establishment appealed the case, presenting expert testimony that a certain operation would cure the man and restore his earning capacity, but the workman would not consent to the operation. The upper court recently decided that no one can be compelled to submit to an operation.

## Marriages

JAMES R. WATTLEWORTH, M.D., Yale, Ill., to Miss Emma Lincoln, of Oblong, Ill., at Effingham, Ill., May 22.

EVERETT ALDRICH GLADMAN, M.D., Fulton, N. Y., to Miss Ellen M. Emerick, of Syracuse, N. Y., May 22.

CHARLES PAUL SNYDER, M.D., Titusville, Pa., to Miss Adelaide Poole Bailey, of Philadelphia, June 5.

WARREN WALKER, M.D., Philadelphia, to Miss Helen Corbit Perot, of Germantown, Philadelphia, June 4.

HORACE E. CROCKETT, M.D., Los Angeles, Cal., to Miss Katherine Cahill, of St. Louis, Mo., recently.

NORMAN B. REESER, M.D., to Miss Carry A. Gochnauer, both of Camp Hill, Pa., at Baltimore, May 30.

ELLIOTT CALENDAR DUMARS, M.D., Peoria, Ill., to Miss Edith Woods, of Grand Rapids, Mich., June 5.

EARL M. SMITH, M.D., Danvers, Mass., to Miss Abbie M. Hartley, of Amsterdam, N. Y., June 5.

JAMES ROBERT CARE, M.D., Norristown, Pa., to Mrs. Florence K. Meyer, of Overbrook, Pa., June 6.

PAUL F. PERSHING, M.D., to Miss Myra Mock, both of Altoona, Pa., at Pittsburgh, May 21.

J. FORREST BURNHAM, M.D., to Miss Mattie Belle James, both of Lawrence, Mass., June 9.

ERNEST ARTHUR DALE, M.D., to Miss Edna Beatrice Johnson, both of Danville, Ill., June 2.

JOHN W. ODEN, M.D., to Miss Martha Grady, both of Blackshear, Ga., in November last.

ALOYSIUS S. MCNERNEY, M.D., to Miss Carlyn Phister, both of Philadelphia, June 4.

GLEN E. WRIGHT, M.D., Chicago, to Miss Ella Kelly, of Flushing, N. Y., June 8.

LIDIA B. RUSSELL, M.D., Denver, and C. A. Appegarde, in Golden, Colo., May 29.

HAROLD NEUHOF, M.D., to Miss Olga Goldsmith, both of New York City, June 4.

## Deaths

**John L. Short, M.D.** University Medical College of Kansas City, Mo., 1885; formerly professor of physiology, ophthalmology, and otology in Columbia Medical College, Kansas City; a member of the thirty-eighth General Assembly of Missouri; physician and surgeon in charge of the Grace Hospital and Retreat for Women, and the Versailles Eye, Ear, Nose and Throat Dispensary; died in the Flint (Mich.) Sanitarium, recently, as the result of injuries received in a runaway accident six years ago.

**John Arthur Irwin, M.D.** University of Dublin, Ireland, 1875; M.R.C.S., England, 1876; fellow of the London Obstetrical Society and member of the British Medical Association; a fellow of the New York Academy of Medicine; a surgeon of volunteers during the Spanish-American War; formerly president of the British Schools and Universities Society; died at his home in New York City, June 1, from cirrhosis of the liver, aged 58.

**Samuel Shaw Stewart, M.D.** Jefferson Medical College, 1861; for more than a half century a practitioner of Allegheny County, Pa.; assistant surgeon of the One Hundred and Twenty-Third, and surgeon of the Fifty-Sixth Pennsylvania Volunteer Infantry during the Civil War; formerly a member and officer of the Medical Society of the State of Pennsylvania; died at his home in Edgewood Park, May 29, aged 81.

**LeRoy Wendell King, M.D.** University of Michigan, Ann Arbor, 1899; of Lowville, N. Y.; a member of the American Medical Association and president of the Lewis County (N. Y.) Medical Society; who was operated on for appendicitis at the City Hospital, Watertown, four weeks ago; died in the Ogdensburg State Hospital, May 29, aged 37.

**George H. Strowbridge, M.D.** University of Oregon, Portland, 1897; formerly a member of the city council of Portland, and surgeon of an army transport between San Francisco and Manila during the Spanish-American War; died at his home in Portland, May 31, from cerebral hemorrhage, aged 45.

**Joseph Foster, M.D.** University of Michigan, Ann Arbor, 1894; of Lansing; lecturer and demonstrator in the Eye, Ear, Nose and Throat Department of his alma mater; oculist to the Lansing City Hospital; oculist and aurist for the Michigan school for the Blind and the Michigan State Industrial School for Boys; died in Harper Hospital, Detroit, June 2, from pneumonia, aged 53.

**Harry Ross Coover, M.D.** Jefferson Medical College, 1886; of Harrisburg; a member of the Medical Society of the State of Pennsylvania; physician and coroner of Dauphin County and chairman of the legislative committee of the State Coroners' Association; died in the Harrisburg Hospital, June 3, from intestinal obstruction, aged 51.

**Israel Bedell, M.D.** New York University, New York City, 1863; assistant surgeon of the Sixth Ohio Volunteer Infantry throughout the Civil War; from 1880 to 1897 a practitioner of Nebraska City, Neb.; died at his home in Wheeling, W. Va., May 28, from cerebral hemorrhage, aged 78.

**William M. Gay, M.D.** Southern Medical College, Atlanta, Ga., 1881; a member of the Medical Association of the State of Alabama; formerly president of the Chambers County Medical Society and health officer of Chambers County; died at his home in Talladega, May 25, aged 65

**John W. Hoyt, M.D.** Eclectic Medical Institute, Cincinnati, 1851; formerly professor of chemistry and medical jurisprudence in his alma mater, and governor of the Territory of Wyoming; died at the home of his son in Chevy Chase, Md., May 23, from senile debility, aged 81.

**William H. Olds, M.D.** University of California, San Francisco, 1881; a member of the Medical Society of the State of California and a pioneer practitioner of Spokane, Wash.; was shot and instantly killed by his wife, at his home in Spokane, May 28, aged 54.

**Albert F. McVety, M.D.** Queens University, Kingston, Ont., 1886; M.R.C.S. England, 1887; a member of the American Medical Association and College of Physicians and Surgeons of Ontario; died at his home in Toledo, Ohio, June 9, from acute gastritis, aged 58.

**James Thomas Boyd, M.D.** Starling Medical College, Columbus, Ohio, 1849; professor in a medical college in St. Louis from 1879 to 1885 and since that time a practitioner of Indianapolis; died at his home, May 21, from senile debility, aged 89.

**Abraham Feingold, M.D.** University and Bellevue Hospital Medical College, New York City, 1911; house surgeon in St. Marks Hospital, New York City; died in that institution, May 19, from meningitis complicating typhoid fever, aged 22.

**Charles Fuller Leslie, M.D.** Medical School of Maine, Brunswick, 1874; a member of the American Medical Association; for many years a prominent practitioner of Kansas; died at his home in Clyde, June 1, from heart disease, aged 65.

**Edwin L. Wood, M.D.** University of Buffalo, N. Y., 1888; a member of the American Medical Association; for several years a member of the staff of the Jackson Sanitarium, Dansville, N. Y.; died in Beausoil, France, June 2, aged 51.

**John Fife, M.D.** New York University, New York City, 1882; a member of the American Medical Association, and since his graduation a practitioner of Red Bluff, Cal.; died at his home, May 30, from hemorrhage of the stomach, aged 62.

**William A. Beiringer, M.D.** Rush Medical College, 1900; a member of the American Medical Association; assistant to the chair of laryngology in the Chicago Policlinic; died at his home in Chicago, June 3, aged 40.

**William T. Campbell, M.D.** Saginaw Valley Medical College, Saginaw, Mich.; formerly a clergyman of the United Presbyterian Church; died at his home in Rushville, Ind., April 10, aged 75.

**Charles T. Orner, M.D.** Jefferson Medical College, 1867; a member of the American Medical Association; died at his home in Bloomington, Ill., April 26, aged 65.

**Joseph C. Bonzinger, M.D.** University of Maryland, Baltimore, 1863; died at his home in Baltimore, May 4, from heart disease, aged 68.

**Carey Fenton Marshall, M.D.** New York University, New York City, 1879; died at his home in Lynn, Mass., May 31, aged 57.

**Andrew Stephen Shorb, M.D.** Pulte Medical College, Cincinnati, 1879; died at his home in Los Angeles, Cal., May 20.

**Alfred Richmond, M.D.** Detroit Medical College, 1872; died at his home in Claremont, Cal., recently, aged 68.

**Thurman L. Wagner, M.D.** College of Physicians and Surgeons, Chicago, 1903; of St. Louis; an *x*-ray specialist; died in Wabash, Ind., May 28, from malignant disease, believed to have been due to prolonged exposure to the *x*-ray, aged 35.

**Francesco G. Calivia, M.D.** Eclectic Medical College of the State of New York, 1911; of New York City, who was shot by an unknown assassin in the hallway of his home, May 22, died in the Gouverneur Hospital, May 23, aged 24.

**John Marks Stewart, M.D.** Queens University, Kingston, Ont., 1882; a member of the town council of Chesley, Ont., from 1887 to 1897 and reeve from 1897 to 1902; died at his home May 25, from heart disease, aged 53.

**Andrew Harper Caldwell, M.D.** University of Virginia, Charlottesville, 1909; of Hot Springs, Ark.; died in the Presbyterian Hospital, Memphis, Tenn., May 17, after an operation for appendicitis, aged 28.

**Asher S. Bender, M.D.** Medico-Chirurgical College of Philadelphia, 1899; was found dead in his office in Charleroi, Pa., May 31, it is believed from the effects of poison, self-administered, aged 34.

**Thomas Blackstone, M.D.** Bellevue Hospital Medical College, 1873; a member of the American Medical Association, and a trustee of the Ohio University; died at his home in Circleville, June 5, aged 64.

**Frederick E. Rabe, M.D.** New York Homeopathic Medical College, New York City, 1883; a member of the New York Pathological Society; died at his home in New York City, May 21, aged 58.

**John H. Miller, M.D.** Jefferson Medical College, 1842; who was in active practice in Missouri and Colorado until 1900; died at his home in Littleton, Colo., June 1, from pneumonia, aged 92.

**James L. Stewart, M.D.** University of Arkansas, Little Rock, 1895; a member of the Arkansas Medical Society; died at his home in Spadra, May 26, from abscess of the lung, aged 56.

**John Smallbrook Howkins, M.D.** University of Maryland, Baltimore, 1897; a member of the American Medical Association; died at his home in Savannah, Ga., May 25, aged 54.

**George J. Friedrichs, M.D.** Tulane University, New Orleans, 1883; a dentist and practitioner of New Orleans; was killed in a street-car accident in that city, May 31, aged 82.

**Rudolphus A. Sloan** (license, Tenn., 1889); surgeon in the Confederate service during the Civil War; died in his home at Chattanooga, May 28, from nephritis, aged 81.

**Fletcher Gilpin, M.D.** Jefferson Medical College, 1866; of Newfoundland, Pa.; died at the home of his daughter in Westfield, N. J., May 29, from nephritis, aged 69.

**Charles E. Quire, M.D.** Rush Medical College, 1870; and since that time a practitioner of Lynnville, Ia.; died at his home in that place, May 25, aged 69.

**John Wright Ostrander, M.D.** College of Physicians and Surgeons, New York City, 1866; died at his home in Brooklyn, May 22, from heart disease, aged 68.

**Mary Pile Silver** (license, Utah, five years of practice, 1894); a prominent Mormon practitioner of Salt Lake City; died at her home, May 11, aged 77.

**Thomas Dunn McConnell, M.D.** Miami Medical College, Cincinnati, 1883; burgess of Prospect, Pa.; died at his home in that place, June 2, aged 57.

**Aquilla Nebeker, M.D.** Eclectic Medical College of Pennsylvania, Philadelphia, 1870; died at his home in South Philadelphia, May 27, aged 69.

**Seymour Syria Williams, M.D.** University of Michigan, Ann Arbor, 1888; died at his home in Kansas City, Mo., May 19, from catarrhal pneumonia.

**E. H. Bratton, M.D.** (license, Tenn. 1889) one of the oldest practitioners of Lafayette; died recently at his home in that place, aged 73.

**Samuel G. Rogers, M.D.** Indiana Eclectic Medical College, Indianapolis, 1885; died at his home in Darlington, Ind., May 27, aged 55.

**John Lewis Herbert, M.D.** Louisville (Ky.) Medical College, 1881; died at his home in Hanoverton, Ohio, June 1, aged 54.

**James E. Smith, M.D.** Eclectic Medical Institute, Cincinnati, 1878; died at his home in Mt. Carmel, Ill., April 20, aged 73.

**J. T. Riley, M.D.** Physio-Eclectic Medical College, Cincinnati, 1883; died at his home in Orangebury, S. C., May 21, aged 50.

**Pierce J. O'Brien, M.D.** Albany Medical College, 1898; died at his home in Troy, N. Y., May 26, aged 38.

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# The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

## TURNER OBESITY CURE

### Another Fraudulent Fat-Reducing Concern. Incidentally, the Vanadium Chemical Company. How Turner Works Both the Public and the Doctors

A few weeks ago we devoted some space to an "obesity cure" fraud of Denver conducted under the name Marjorie Hamilton. As was explained at the time, there are on the market several fake so-called drugless treatments for fat reduction. They are the natural outgrowth of the versatility of quackery. The public has been warned of the dangers of taking thyroid extract, the basis of most of the "obesity cures" of four or five years ago, until it has become unprofitable to market these preparations. Medical fakers, ever ready to take advantage of popular prejudice or fear, have turned their energies to the exploitation of the so-called drugless treatments. We say "so-called" because, as a matter of fact, they are in no sense of the word, drugless.

The Dr. Turner Company of Syracuse, N. Y., sells the "Dr. Turner Triplex System of Flesh Reducing," or, as the later letter-heads have it, the "Dr. Turner Triplex System of Weight Reduction." Its letters are signed—by rubber stamp—F. Turner, M.D. "Dr." F. Turner tells the public through the newspapers that he is a "physician, scientist and traveler who has won fame and world-wide renown through his writings and scientific researches." He further states that he "was one of the fattest men" in Philadelphia. He was so fat, that:

> "With practically a death sentence staring him in the face and a wife and family to support, Dr. Turner thought hard."

As a result of his hard thinking he "finally made a most wonderful scientific discovery" by which he was able to make his fat disappear "at the rate of a pound a day, sometimes more."

> "His method is simple, yet thoroughly scientific. There are no medicines or drugs to be taken, nothing to wear, no physical culture or violent exercises, no Turkish baths, sweating, purging, starving diets or weakening methods of any kind."

Before discussing "Dr." Turner's "cure," it may be worth while to refer briefly to "Dr." Turner himself. While the

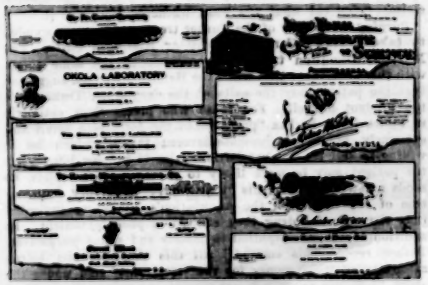



Fig. 1.—Photographic reproduction (greatly reduced) of the letter-heads of some of the concerns with which E. Virgil Neal (X LaMotte Sage) and Thomas F. Adkin are said to be connected.

obesity cure concern at Syracuse, N. Y., is sending out what purport to be personal letters signed, F. Turner, M.D., Turner is really living at Pittsburgh, Pa., where he is engaged as general manager of the Vanadium Chemical Company in exploiting so-called ethical proprietaries to physicians.

As a matter of fact, the Dr. Turner Company of Syracuse is but one of a group of enterprises that are said to be the offsprings of the fertile brain of an individual known as E. Virgil Neal, in collaboration with one Thomas F. Adkin. Here are a few of the names under which the Neal-Adkin mail-order concerns advertise:

*To-Kalon Manufacturing Company*, makes you beautiful.
*Cartilage Company* (K. Leo Minges), makes you tall.
*Harriett Meta*, eradicates your wrinkles.
*Everett Wood*, grows hair on bald heads.
*Roman Solvent Laboratory*, removes superfluous hair.
*Mac Edna Wilder*, removes double chins.
*Okola Laboratory*, cures sore eyes.
*Corsetiere*, makes corsets.
*Paris Academy of Beauty Arts*, mail-order course in bust developing.
*Dr. Turner Company*, makes fat people thin.
*New York Institute of Science*, mail-order course in hypnotism and magnetic healing.

#### A PRINCE OF QUACKERY

E. Virgil Neal is a picturesque figure in the world of quackery. He came into the limelight in 1905 as president of the "Force of Life Chemical Company." This fraudulent concern was investigated by the federal authorities from whom it received a heavy coat of whitewash when it was found that an influential New York politician—Gen. James R. O'Beirne—was connected with it. The publicity given, however, proved its undoing. During the same period, Neal, also conducted a bank which is said to have furnished capital for small publishing houses, the loans mostly being paid by advertising space in the publications. Previous to his connection with the Force of Life Company, Neal conducted the "New York Institute of Physicians and Surgeons," which the government declared fraudulent. He was also connected with the "Columbia Scientific Academy" which purported to be a "school" of palmistry. Earlier still, Neal is said to have traveled over the country under the alias, X. LaMotte Sage, giving exhibitions of hypnotism to ten-cent audiences. After the Force of Life concern went out of existence, Neal organized the Neal Biscuit Company which later changed its name to the American Health Products Company. At present, we find X. LaMotte Sage, president of a fake concern, the "New York Institute of Science," which gives correspondence courses in hypnotism and magnetic healing. From what has been said, it is evident that "Dr." F. Turner is but a figurehead in the obesity company that bears his name.

#### ASK $25; TAKE $2

Those who write to the Dr. Turner Company regarding his Triplex System of Weight Reduction receive a letter printed in imitation typewriting and so designed as to give the impression that it is a personal communication. After detailing the dangers and terrors of obesity, Turner offers to send his treatment for $25 or, if the purchaser will sign a "contract of secrecy," he will send it for $10. In a postscript to this first letter, he says:

> "$10 is positively the lowest price for which I shall ever sell this treatment."

Ten days later the second form-letter comes, which contains no reduction in the price of the treatment. A month later the third form-letter offers the treatment for $5. While three weeks later, form-letter number four brings the price down to $4. In another month the fifth form-letter arrives making a price of $3. Another four weeks elapses and form-letter number six offers to send "the entire treatment, nothing omitted, on receipt of only $2." A money order for two dollars was sent and by return mail there was received "Dr. Turner's Triplex System of Weight Reduction." The "system" consisted of twenty-six sheets of imitation typewriting and a box of tablets.

The first two pages of the "manuscript" explain why the "Dr. Turner's Triplex System of Scientific Weight Reduction" is the only safe and rational treatment and why all other "treatments" are either dangerous or worthless. Turner would impress you with the vast gulf that exists between obesity cures exploited by non-medical men and that offered by F. Turner, M.D.:

"A reputable and thoroughly responsible physician—unlike some obscure and unscrupulous individual who can hide behind a fictitious name and easily disappear over night, if necessary—has his reputation, his license, his practice and everything dear to him and worth living for, to lose beyond recall should be deal otherwise than honestly and honorably with his patients."

Of course the purchasers of the Turner obesity cure outfit may be expected to be duly impressed with the fact that the concern is operated by a "reputable and thoroughly responsible physician." They have no means of knowing that "Dr." Turner whose signature appears on all the letters they receive from the obesity cure of Syracuse, N. Y., is "Dr." Francis M. Turner, the general manager of the Vanadium Chemical Company of Pittsburgh, Pa., which exploits proprietaries to physicians. Neither have they any means of knowing that F. Turner, M.D., runs little risk of losing "his reputation, his license, his practice."

The following letter from the Bureau of Medical Education and Licensure of Pennsylvania was received in answer to an inquiry as to whether "Dr." Francis M. Turner was licensed to practice in Pennsylvania:

COMMONWEALTH OF PENNSYLVANIA

MAY 8, 1912.

*Journal American Medical Association,*
*Chicago, Ill.*

*Dear Sirs:*—Upon careful examination of our medical records, we find that Francis M. Turner has never received a license which would entitle him to practice medicine in this state. Yours truly,

MARY Y. MCREYNOLDS,
Clerk for Bureau of Medical Education and Licensure.

And this from the New York authorities:

STATE OF NEW YORK, EDUCATION DEPARTMENT

ALBANY, June 7, 1912.

*Journal American Medical Association,*
*535 Dearborn Avenue, Chicago, Ill.*

*Gentlemen:*—In reply to your letter of the 4th, I beg to say that neither the name Dr. Francis M. Turner nor Dr. F. Turner appears on our list as a physician in New York State. Yours truly,

AUGUSTUS S. DOWNING,
First Assistant Commissioner of Education.

The states of New York and Pennsylvania are the only ones, apparently, from which Turner does business. If he is licensed in neither one of them, it is fair to assume that he has no license to lose; without a license, he cannot legally practice and therefore has no practice to lose; and if, without license or practice, he so advertises as to convey the idea that he has both, he cannot have very much reputation to lose.

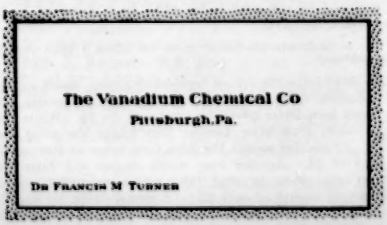



Fig. 2.—Photographic reproduction of the business card used by "Dr." Francis M. Turner in his capacity as general manager of the Vanadium Chemical Company.

Pages three, four and five of the "Triplex System" give in detail what purports to be Turner's personal experience with obesity. Briefly, his story is that at the age of 27 he began to gain weight and by the time he was 43 and weighed 254 pounds he "awoke at last to a thorough realization" of the fact that he was becoming obese. Dr. Turner's awakening produced effects that closely resembled a similar awakening in Marjorie Hamilton's case, whose cure for fatness has been referred to before. When Marjorie realized that she had become fat, she says that she studied "into the long weary hours of night and tried experiment after experiment." When "Dr." Turner discovered his obeseness, he—but let him speak for himself:

"I studied and experimented, often working blindly day and night, as I never had worked before."

Like Marjorie he was successful in perfecting "the most wonderful treatment for obesity ever discovered." Like Marjorie's, too, Turner's "treatment" is radically different from all accepted theories.

WHAT THE TREATMENT IS SAID TO BE

The Turner "treatment" should be considered not only in the light of what it is but rather by comparison between what it is and what those who purchase it are led to believe it is. Some quotations from advertisements will make plain what those who send in the $25—or less—for the Triplex System may expect to get for their money:

"You eat what you want whenever you want it."
"I do not purge you nor give you any drugs whatever."
"No drugs, medicines, starvation diet, exercising or apparatus used."
"There are no medicines or drugs to be taken, nothing to wear, no physical culture or violent exercises, no Turkish baths, sweating, purging, starvation diet or weakening methods of any kind."

WHAT THE TREATMENT REALLY IS

Such are the claims under which the Turner "obesity cure" is sold. Both by inference and by direct statement they justify the prospective purchaser in believing that the use of purgatives, the following of any special diet or the carrying out of any set exercises do not form any part of the Turner treatment. After he has parted with his money, however, he finds, as in the case of the Marjorie Hamilton "treatment" that he is to do all of the things which he has been led to believe were neither necessary nor part of the "cure." Briefly the Turner System requires:

*Dieting.*—Potatoes and a large list of other commonly eaten vegetables are interdicted. Nothing containing ordinary wheat flour such as bread, biscuits, cake, etc., nor any cereal or cereal products may be taken. Sugar in any form must not be taken but Dr. Turner's saccharin tablets at fifty cents a bottle may be used instead. Various kinds of fish, fried, hard boiled, or omeletted eggs, fried meat of any kind, veal, pork, ham, bacon and various other meats, pies, pastries, prunes, bananas, any kind of sweets and a score of other things—all are prohibited by the Dr. Turner treatment which is sold under the specific claim: "You eat what you want whenever you want it."

*Purging.*—The user of the Turner treatment is recommended to take artificial Carlsbad, Vichy or Kissingen Salts. The Marjorie Hamilton treatment recommended the same thing, with this difference: that while the Hamilton concern suggested that the patient buy the salts at the drug-store, Turner sells the product himself. For those who prefer their cathartic in tablet form, he has "prepared in the form of a small and extremely palatable chocolate-flavored tablet" which he is willing to sell "at the special low price of $1" for 100. That the patient may be more likely to purchase these tablets, he sends a few along with his "treatment." A cursory examination of the tablets in the Association's laboratory indicated that the essential drug they contain is phenolphthalein. In addition to the phenolphthalein tablets and saline purgatives, Turner recommends enemas. All this the purchaser learns after having spent money for the "treatment" sold under the claim "I do not purge you nor give you any drugs whatever."

*Exercising:* The purchaser of the "Triplex System" is also instructed to stand before an open window both on rising in the morning and on retiring at night and take one hundred deep breaths. He must, in addition, go through a series of exercises with the arms and trunk and in addition "take a long brisk walk" morning and evening. But he bought the "treatment" under the claim that "no exercising" was necessary!

### THE FOOD TABLET HUMBUG

So much for the discrepancy between what is offered and what is furnished. In the Marjorie Hamilton fake the part of the treatment that was relied on by the manufacturers to be a good "repeater" was the "Healthtone-Obesity Powder" which was claimed to "dissolve fat"; in the Turner humbug the tablets which come with the printed instructions are the means whereby the Dr. Turner Company expects to squeeze additional dollars from those who are foolish enough to purchase the "Triplex System." Two lots of tablets accompany each treatment, one labeled "Concentrated Food Tablets" and the other labeled "Special Food Tablets." The two kinds differ only in color, each being about the diameter of a silver dime. The "concentrated food tablets" are a dirty white color, while the "special food tablets" are a mottled gray. Both lots of tablets were submitted to examination in the Association's laboratory and the chemists submitted the following report:

#### LABORATORY REPORT

*Dr. Turner's Concentrated Food Tablets:* The tablets weigh about 1.18 gm. each or approximately 18 grains. They are grayish-white in color with a faintly, sweetish, ginger-like taste. Qualitative tests demonstrated the presence of milk sugar, casein, calcium salts, starch, ginger, fats and powdered talc. Quantitative examination indicated the presence of the following substances in the amounts given:

| | |
|---|---|
| Starch and ginger (mostly starch) | 1.51 per cent. |
| Talc | 1.83 per cent. |
| Ash (exclusive of talc) | 6.09 per cent. |
| Water (loss at 100 C.) | 5.59 per cent. |
| Fat (ether extract) | 0.60 per cent. |
| Milk sugar | 47.60 per cent. |
| Casein and other proteins (N × 6.38) | 32.67 per cent. |

The chief constituents of the tablets, therefore, are milk sugar and casein. A product of similar composition would result from the evaporation of "skimmed milk." Hence, it is possible that Turner's concentrated food tablets are nothing more than milk from which the most of the fat has been removed, the resultant whey subsequently evaporated, the residue powdered and made up into tablets by means of a little talc, starch, and a trace of ginger.

*Dr. Turner's Special Food Tablets:* The tablets weigh about 1.25 gm. each or about 19 grains. Their color is somewhat darker than the "Concentrated Food Tablets" but their taste is similar. Qualitative tests indicated the presence of the same constituents as were found in the "Concentrated Food Tablets." The quantitative examination indicated the presence of the following substances in the quantities given:

| | |
|---|---|
| Starch and ginger (mostly starch) | 0.84 per cent. |
| Talc | 0.99 per cent. |
| Ash (exclusive of talc) | 6.33 per cent. |
| Water (loss at 100 C.) | 5.08 per cent. |
| Fat (ether extract) | 0.60 per cent. |
| Milk sugar | 49.65 per cent. |
| Casein and other proteins (N × 6.38) | 31.60 per cent. |

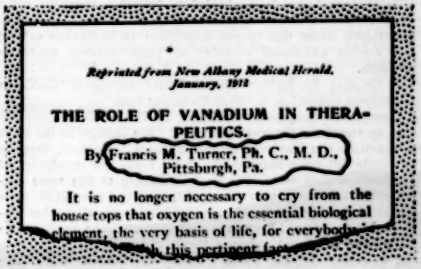
Examination shows that there is practically no difference in composition between the "Concentrated Food Tablets" and the "Special Food Tablets."

What then is the value of these tablets of dried whey? The answer is forthcoming in the follow-up letters that came subsequent to the purchase of the original "treatment." The first letter of this kind comes the day after the "system" itself has been delivered, and bears the following warning:

"Be careful not to underestimate the importance of the concentrated food tablets I have sent you. I do not guarantee the success of my treatment unless these are taken."

A little more than two weeks later another letter comes urging that an additional $8 be sent for which the Dr. Turner Company will furnish "two full months' treatment or just twice the quantity of treatment you received at first." This can only mean, of course, that the eight dollars is for a double supply of "Concentrated Food Tablets." If this offer is not taken, another letter comes three weeks later recommending "an additional course of treatment." Turner's price for this additional course of treatment is $25, but he is "so anxious to have you continue this treatment until your weight is fully and completely reduced to its normal standard" that he will send it to you "for the exceptionally low price of $5." Should you still be obdurate, another letter comes about a month later offering the same thing for $3. The value of the "concentrated food tablets"—to the concern selling them—is thus evident. They form the "repeaters" which every successful patent medicine faker finds so necessary as a dividend producer.

To revert again to the "Triplex System": In addition to limiting the diet, going through a series of exercises, using saline purgatives and enemas, the Turner system described what it



*Reprinted from New Albany Medical Herald, January, 1912*

**THE ROLE OF VANADIUM IN THERAPEUTICS.**

By Francis M. Turner, Ph. C., M. D., Pittsburgh, Pa.

It is no longer necessary to cry from the house tops that oxygen is the essential biological element, the very basis of life, for everybody ... with this pertinent fact ...

Fig. 3.—The Vanadium Chemical Company, of which "Dr." Francis M. Turner is general manager, sends out a leaflet containing an article by "Francis M. Turner, Ph.C., M.D.," extolling the therapeutic value of vanadium.

calls "other aids to reduction." The "other aids" are the "To-Kalon Keapshape Reducing Corset" which Dr. Turner is willing to arrange to have you purchase "direct from the manufacturers at a much lower price than it could be bought for at a retail store." The special reduced price is $12.00. The reader will recognize in the name To-Kalon one of the many companies which E. Virgil Neal is said to control. The other "aid to reduction" recommended by Dr. Turner is the "Neal Reducing Belt" of which he says he "cannot speak too highly." The belts contain "medicated obesity pads." "In many cases fat begins to soften perceptibly and fairly seems to melt away when the belt and pad have been worn only a few days." He advises the purchase of two belts. "This plan is recommended for many reasons," not the least of which, we opine, is the fact that the Dr. Turner Co. participates in the profits of their sale—regular price $15.

#### SUMMARY

Such is Dr. Turner's Triplex System of Weight Reduction. The various deceptions practiced by the concern may be summarized:

1. The public is told that "Dr." Turner is a Philadelphia physician and a "scientist and traveller who has won fame and world-wide renown through his writings and scientific researches." The Pennsylvania authorities deny that Turner is, or ever was, licensed to practice medicine in that state and the New York authorities declare that he has no license there. Turner is unknown as a scientist and his claim to being a "traveller" apparently rests on no more substantial evidence than the fact that he used to be a travelling salesman. He has won neither fame nor renown, either through his writings or researches and the only "writings" bearing his name, so far as we can discover, are his "obesity cure" letters and "treatment" and an advertising leaflet entitled "The Rôle of Vanadium in Therapeutics" issued by the company of which he is general manager.

2. The purchaser is given the impression that he will receive treatment and advice from a reputable licensed physician; instead he receives a set of printed instructions and worthless tablets from a business concern organized by men who are engaged in various other fraudulent mail-order enterprises.

3. The victim is led to infer that dieting is unnecessary and not a part of the treatment: "You eat all you want whenever you want it." He finds, after parting with his money, that to follow the "treatment" he must cease eating many commonly-used articles of food.

4. He pays his money on the understanding that purging is unnecessary and is foreign to the "treatment"; he discovers—after payment—that various saline purgatives are recommended which the concern itself offers to furnish—for an additional cash consideration.

5. He buys the system under the belief that no "physical culture" exercises need be indulged in, only to find that a system of calisthenics and a "long brisk walk" morning and evening besides "breathing exercises" are actually part of the "treatment."

6. The purchaser is deceived into believing that the dried whey tablets furnished by the company have a definite value in bringing about the desired reduction; he is further cajoled into buying additional supplies of these utterly worthless products.

7. He may be further wheedled into buying a "To-Kalon Keapshape Corset" or a "Neal Reducing Belt."

Founded on deception, maintained by falsehood and perpetuated by fraud the Dr. Turner Obesity Cure belongs in the same category as the Marjorie Hamilton "cure." In fact, there is but little difference between the two. From the standpoint of the medical profession, the Turner concern is the more contemptible because of the attempt to use the title M.D. as a means of lending an air of respectability to an altogether disreputable business. From the standpoint of the public there is nothing to choose between them; they are both humbugs and in either case the public's money is obtained under false and fraudulent pretenses.

## Correspondence

### "Louder, Please."

The recent Atlantic City meeting of the American Medical Association again indicates that the prevailing ailment among the members who read papers is vocal insufficiency, if I may be permitted to make this addition to our medical nomenclature. A full-grown man ought to be able, with a little practice, to make himself heard 100 feet away. If he were speaking to one man across a large hall he would have no difficulty in making that man understand. It is distressing to listen to a paper read in so low a voice that only part of it can be heard, and it is unpardonable for a man to inflict his paper on a society unless he is willing to read it in a clear, strong voice. This is not much to ask and it is essential. Otherwise, his paper should be read by title only, leaving the printer to do the rest.

C. J. DOUGLAS, M.D., Dorchester, Mass.

### Who First Sutured the Human Heart?

*To the Editor:*—In the "Cyclopedia of American Medical Biography" by Dr. Howard A. Kelly (vol. 1, p. 31) occurs the following: "The successful operation for an incised wound of the heart reported by Marks (*Med. Fortnightly*, 1893, vi) is probably the first operation ever reported for suture of a heart wound. G. T. Vaughan gives priority to Farina of Rome, 1896, (THE JOURNAL A. M. A., Feb. 6, 1909, p. 429). . . . Vaughan's table showed up to 1901, 150 operations."

There are several errors in this statement. In the first place, Dr. Marks' article was published in the *Medical Fortnightly*, 1893, volume iii, instead of volume vi. In the second place, my table of suture of wounds of the heart showed 150 operations up to 1908 instead of 1901. In the third place, the statement that Dr. Marks' case was "probably the first operation ever reported for suture of a heart wound is not sustained by the references given. I have carefully read Dr. Marks' article in the *Medical Fortnightly*, in which he reports two cases of stab wound of the heart treated by him. There is not one word about suturing the heart or even of operating on the heart—the wounds in the *chest* having been simply packed with gauze. I yield to none in my feeling of pride in the achievements of American surgeons, but I believe that credit should go where it belongs and in this case, so far as I have been able to ascertain, it belongs to Guido Farina of Rome. His original article, "Sutura del Ventricolo Destro," may be found in the *Bollettino della reale Accademia Medica di Roma*, 1896-7, xxiii, 248.

GEORGE TULLY VAUGHAN, Washington, D. C.

### Caffein as a Cause of Goiter

*To the Editor:*—The remarkable frequency of goiter in youths applying for examination, preliminary to enlistment, inaugurated a series of questions, one of which—"What beverages do you drink?"—in every instance brought out the answer, "Coca-Cola." The stimulating action of caffein may or may not be the cause of this condition; it is, nevertheless, suspicious. In examining thousands of men, aged from 17 to 28, this defect has caused a large number of rejections, and I am more pronouncedly of the opinion that the suspicion formed some years ago—i. e., caffein stimulation—is well founded. In questioning these men, I do not suggest; I simply prod until I get the information, and it has never been lacking.

L. L. VON WEDEKIND, M.D., U. S. Navy, Chicago.

### President Jacobi's Address

*To the Editor:*—President Jacobi's speech in THE JOURNAL, June 8, is a masterpiece of eloquence and good common sense, and in my judgment should be put into pamphlet form and distributed among the medical profession. It bears reading several times and is well worth the year's subscription price.

LOUIS H. FREEDMAN, M.D., Crowell, Texas.

[COMMENT.—We shall be glad to send a reprint of President Jacobi's address to any one who will send a stamped directed envelope.—EDITOR.]

## Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

### ABDOMINAL TUBERCULOSIS AND CERVICAL ADENITIS

*To the Editor:*—A child of 18 months developed a non-febrile cervical adenitis which was not tender. Under iodin externally and an alterative internally this disappeared in five days. In two weeks attention was called to an edema of the left leg, and examination showed a large tumor in the lower part of the abdomen and enlargement of the kidneys. The child died in six weeks and post-mortem examination showed tuberculosis of the retroperitoneal glands and a tumor mass the size of a doubled fist, in which were embedded the ureters, causing hydronephrosis of both kidneys. Is it possible that this condition of the peritoneal glands could have been caused within two weeks by the treatment used in the cervical adenitis? J. L. T.

ANSWER.—In all probability, the tuberculosis of the abdomen which produced the enlargement of the kidneys and edema of the leg had existed for more than two weeks. It is not possible to say whether the infection was transmitted to the abdomen from the cervical gland. It is possible that by massage of such glands some bacilli might have been forced into the circulation, but, in our opinion, it is not reasonable to attribute the infection of the retroperitoneal glands to the treatment.

### THE PAN-AMERICAN MEDICAL CONGRESS

*To the Editor:*—In THE JOURNAL, June 1, 1912, p. 1608, an announcement appears of the Sixth Pan-American Medical Congress, to be held at Lima, Peru, August, 1913. The name and address of its secretary are omitted. Kindly supply this, as that will enable such members of the profession as desire to participate in the congress to enroll and obtain such information as they may require.

DR. ALFRED E. REGENSBURGER, San Francisco.

ANSWER.—The secretary of the International Executive Committee of the congress is Dr. Ramon Guiteras, 80 Madison Ave., New York City. Further particulars may be obtained from the editor of the local medical journal, the *Cronica Medica*, Dr. E. Bello, Apartado postal 629, Lima, Peru.

# Medical Economics

THIS DEPARTMENT EMBODIES THE SUBJECTS OF POST-GRADUATE WORK, CONTRACT PRACTICE, LEGISLATION, MEDICAL DEFENSE, AND OTHER MEDICOLEGAL AND ECONOMIC QUESTIONS OF INTEREST TO PHYSICIANS

## IS A CHILD WORTH AS MUCH AS A HOG?

An excellent editorial under the above heading appeared in the March issue of the *Maryland Medical Journal*. The creation of a Bureau of Child Welfare by the federal government is an example which will, we hope, be followed by all of our states, until all the facts regarding child labor are known, and until in all of our states provision is made for the welfare of our "little citizens." Meanwhile, such editorials as this are of value in arousing public and professional sentiment. The editor says:

Well worth the earnest attention of our best alienists is that peculiar process of reasoning by which the father, on becoming a legislator, devotes his energies to the increasing of the state's revenues, but entirely forgets the right of the child. The particular phobia besetting members of the legislature when questions of child labor are raised is not confined to the state of Maryland alone. Spasmodically, it is true, the lawmaker recollects that the child of to-day is the parent of to-morrow, and a protective law goes through. But, usually it is ignored, or the loopholes by which it may be evaded are so numerous that it is ineffective.

With the advent of machinery it was thought that the millennium was near at hand. With manual labor reduced to a minimum the public confidently expected that life would be lighter, easier and healthier. But contrary to expectations, machinery, while undoubtedly the greatest civilizing agent in the world's history, has added to, rather than decreased the misery of the laboring classes. It was soon found that a child could be taught to swing the levers which controlled the action of a machine, therefore a child was employed at lower wages than those demanded by an adult, and the same amount of work ground out. It soon became apparent that the younger the child the less the wage and the greater the profit to the employer; and the result—little boys and girls of extremely tender age—in some instances the worker being under ten years of age—were employed. If the years of playtime were taken from the child, and he were paid a wage which would enable him later to gain the education necessary to comfortable living, the system might be condoned, but under existing conditions the little benighted creatures are often paid $2 a week and less and are often forced to work fourteen to fifteen hours a day in order to squeeze the last drop of productiveness from them, and are therefore unable to lay aside anything for their future betterment. The heathen in Africa, although he gives his boy hot iron to hold in order to harden his palms, lets him run most of the day to develop his limbs and body; the coal-miner of America sets his boy, all but just from the cradle, on a little black seat all day long, where he must keep his eyes glued to the long chutes down which the coal glides, and pick out each piece of slate he sees. All day long in a dark, gloomy, dirty room, the air heavy with the coal dust, nothing around him but long chutes and other boys like himself, too occupied to talk, the little backs bowed over, nothing to think about but the coal before him; too tired at night to do anything but sleep the minute his supper is over, and this unceasing grind, day in and day out—and the members of his state legislature cannot see why he does not grow up an enlightened man, a credit to the community, when schools are free and they have passed bills for appropriations for playgrounds the child never sees, and parks whereof he knows nothing. While perhaps the work in which children are engaged in states where there are no coal-mines is cleaner, it is surely no more elevating, no more healthy, and no less dwarfing to mind, and soul and body. On Sundays the child gets out and sees richer people enjoying themselves, and unconsciously, the first seeds of anarchy are sown in his mind, ready to spring forth when he reaches maturity and talks with boys raised under similar conditions and equally discontented with life. Meantime the legislators wrangle eloquently over such questions as "what constitutes a Democrat?"

Sooner or later the people of this state must awaken to the fact that a child has rights, and that those rights are not being recognized. The well-to-do parent will see that there are thousands who know nothing of the comforts he has been able to bestow on his own little ones, and the comparison will awaken his sympathies and energies for the comfort of those who have no one to fight their battles. "The children want to work; they want the money"—it's true, but what child would not love to have the moon to play with if he could get it? And what parent does not have to refuse the child something in order to protect its body from physical injury? Yet there are children who have no one to protect them. These little children—the parents of to-morrow—dwarfed to-day, stunted in mind and body—what will their progeny be? Long hours of labor; childish play unknown; sullenness, discontent and rebellion born of an undefined sensation of injustice—these will be instilled into the child with which to-morrow must reckon.

Stringent laws are enacted to keep the San José scale from our apple trees; the most ignorant farmer in the state may receive explicit instructions from the State Department of Agriculture concerning the sort of crop best for his land, and if his hog is ill, the state rushes advice to him lest the hog die; but a hog is a hog, whereas a child is only a child.

This question of child employment is a burning one in every state of the Union. The law of Maryland exempts this class and that class until there are hardly any classes to which it does apply. The ultimate fate of the state is wrapped in its

### OUR NATIONAL BIRTHDAY, PAST AND PRESENT

**The Young Pilgrim's Progress:**
**From Noise and Danger to Games and Safety**

proper solution. No nation can survive if its inhabitants are weaklings, and if for no other reason than pride in our national fate the influential people—most especially the physician who hourly and daily sees the evils of the present state of affairs—should spare no effort in forcing the legislative bodies of this country to enact competent laws looking to the protection of the child.

## AN OPEN LETTER TO PRESIDENTIAL CANDIDATES

The following letter has been sent to President Taft, and also to Colonel Roosevelt, Governor Wilson, Governor Harmon, Senator LaFollette, Hon. Champ Clark, and Hon. Eugene V. Debs, candidates for the presidential nomination, by Miss Alice Lakey, chairman of the Food Committee of the National Consumers' League:

CRANFORD, N. J., June 11, 1912.

The Food Committee of the National Consumers' League desires to obtain from you some statement as to your intention in regard to the future of the Food and Drugs Act of June 30, 1906.

This law would have afforded consumers complete protection under its provisions from the evils of adulterated, misbranded, poisonous and harmful foods, drugs, liquors and medicines, had it not been betrayed, as was demonstrated by Dr. Wiley's resignation.

Is the policy to continue of relaxing the enforcement of the law in favor of certain privileged manufacturers?

Is the policy to continue of letting Mr. McCabe decide legal questions connected with the enforcement of the act, or is the law to be enforced only through the courts, as was intended when the act was first enacted?

Is Secretary Wilson to be continued in office and to have the power to stop the enforcement of the law, notably in the case of the sulphuring of fruits, when he announced that "this law has got to stop?"

Was it intended that the Secretary of Agriculture alone should have the power of life and death over the pure food law?

Is it just to consumers to retain in office Secretary Wilson and Messrs. McCabe and Dunlap, when these men have steadily upheld the special interests to the disadvantage of the pure food law and the detriment of the consumer?

If you are elected to the high office of President of these United States, will you remove from office these faithless officials who have steadily favored the weakening of the law, who have permitted its fundamental principles to be violated? These are the questions that vitally concern consumers.

We ask you what you will do, so that we may know what is to be the fate of the greatest law for the protection of the home ever enacted in this country.

I have the honor to remain,

Very truly yours,

ALICE LAKEY,
Chairman, Food Committee, National Consumers' League.

The following letter has also been sent to the members of the League:

CRANFORD, N. J., June 4, 1912.

Dear Madam:

Enclosed please find reprints from *Collier's*. As you know it was largely through the united action of the General Federation of Women's Clubs and the National Consumers' League that public sentiment was aroused which resulted in the passage of the pure food bill.

Can we not now unite and save the law from destruction?

Will your organization ask President Taft for the removal from office of Secretary of Agriculture, James Wilson, Solicitor George B. McCabe and Dr. F. L. Dunlap, the three men responsible for the wrecking of the pure food law?

Will you consider the appended resolution, passed and published by the Food Committee in October, 1911, and endorsed by the executive board of the National Consumers' League at the meeting held at the National Arts' Club, in New York, on May 17, 1912?

We hope that the General Federation of Women's Clubs will take similar action at the biennial in San Francisco.

Sincerely yours,

ALICE LAKEY,
Chairman, Food Committee.

### RESOLUTION

WHEREAS, the acceptance of Dr. Harvey W. Wiley's resignation as Chief of the Bureau of Chemistry is the most serious blow that has befallen Pure Food Legislation, and

WHEREAS, Dr. Wiley has stated that his resignation was due to the fact that the differences between him and his superior officers respecting the enforcement of the pure food law were so irreconcilable that the fundamental principles of this, one by one, have been paralyzed and discredited; that interests engaged in the manufacture of misbranded and adulterated foods and drugs have escaped punishment; that officials who secretly plotted his destruction were retained in office after his exoneration of charges made against him, therefore be it

*Resolved*, That we, the food committee of the National Consumers's League, deeply deploring the disorganized condition of the Department of Agriculture, which renders the strict enforcement of the pure food law impossible, urge upon President Taft the need of the immediate removal from office of Secretary of Agriculture James Wilson, Solicitor George B. McCabe and Dr. F. L. Dunlap, as these three faithless officials have been directly responsible for the complete breaking down of the pure food law.

## Book Notices

TREASURY OF HUMAN INHERITANCE. Parts 7 and 8, Section 15a. Dwarfism. By H. Rishbieth, M.A., M. D. (Cantab.), F.R.C.S. (Eng.), and Amy Barrington. Paper. Price, 15 shillings net. Pp. 573, with plates and illustrations. University of London, Francis Galton Laboratory for National Eugenics. Eugenics Laboratory Memoirs 15. London: Dulau & Co., 37 Soho Square, W.

This elaborate volume from the Francis Galton Laboratory for National Eugenics contains a study of the various forms of dwarfism—ethnic dwarfs, achondroplasiacs, the dwarfism of rickets, myxedema, cretinism, and ateliosis or true dwarfism. The subject is treated from all points, including the historical, and a long list of paintings of dwarfs by famous painters is given. The pedigrees of all reported cases, together with eight graphic plates of pedigrees and thirty-five plates of photograph and *x*-ray illustrations are given of the various classes of dwarfs. Although this is a book of nearly 600 pages exclusive of the illustrations, it represents only a very small fraction of the scope of the investigations of the Eugenics Laboratory.

THE STORY OF A DOCTOR'S TELEPHONE—TOLD BY HIS WIFE. By Ellen M. Firebaugh. Cloth. Price, $1.25. Pp. 239. Boston: Roxburgh Publishing Company, 1912.

This is a pleasing little story of the experiences of a doctor's wife in answering the office telephone, which was connected with the residence for her convenience. Her trials are amusingly related. Some patients took it as a personal injury that she answered the telephone at all and refused to give name or telephone number, evidently thinking that the doctor's business was not his wife's affairs. Others asked her regarding the advisability of having operations, or wanted her to prescribe. The story concludes with a little "preachment" on the dangers and causes of ophthalmia neonatorum.

TRANSACTIONS OF THE NATIONAL ASSOCIATION FOR THE STUDY OF EPILEPSY AND THE CARE AND TREATMENT OF EPILEPTICS. Tenth Annual Meeting, Volume 8. Paper. 1911.

This pamphlet contains the papers read at the tenth annual meeting of the National Association for the Study of Epilepsy, and covers not only the medical and surgical aspects of the disease, but also gives a summary of the legislation in the different states on the care and management of epileptics, and sets forth suggestions and ideas for legislation still needed. Heredity, the industrial status of epilepsy, the Binet-Simon system of testing as applied to epileptics, and practical papers on the management of institutions are also included.

PROCEEDINGS OF THE SECOND ANNUAL CONFERENCE ON THE PROBLEM OF THE EXCEPTIONAL CHILD, 1911. National Association for the Study and Education of Exceptional Children. Paper. Price to Non-Members, $1.50. Pp. 190. Secretary, Waldemar H. Grossmann, Watchung Crest, Plainfield, N. J.

This pamphlet of 190 pages contains the papers read and the discussions held at the second annual conference of the National Association for the Study and Education of Exceptional Children. The papers are by teachers, judges and others interested and working directly in the care of children, and reflect the importance which this subject of the care of the abnormal and subnormal child is attaining. The pamphlet is illustrated by a number of half-tones.

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# Medical Education and State Boards of Registration

## COMING EXAMINATIONS

ALABAMA: Capitol, Montgomery, July 9. Chairman, Dr. W. H. Sanders.

ARIZONA: Phoenix, July 1-2. Sec., Dr. Ancil Martin.

COLORADO: State House, Denver, July 2. Sec., Dr. David A. Strickler, 612 Empire Building.

CONNECTICUT: Regular, City Hall, New Haven, July 9-10. Sec., Dr. Charles A. Tuttle, 196 York Street; Homeopathic, Grace Hospital, New Haven, July 9. Sec., Dr. Edwin C. M. Hall, 82 Grand Avenue; Eclectic, Hotel Garde, New Haven, July 9. Sec., Dr. T. S. Hodge, 19 Main Street, Torrington.

INDIANA: Room 37, State House, Indianapolis, July 9-11. Sec., Dr. W. T. Gott.

MAINE: State House, Augusta, July 16-17. Sec., Dr. Frank W. Searle, 776 Congress Street, Portland.

MASSACHUSETTS: State House, Boston, July 9-11. Sec., Dr. Edwin B. Harvey, Room 159, State House.

MISSOURI: Gymnasium of the St. Louis University, St. Louis, June 24-26. Sec., Dr. Frank B. Hiller, State House, Jefferson City.

NEW HAMPSHIRE: State House, Concord, July 9-10. Regent, Mr. H. C. Morrison, State Library.

NEW MEXICO: The Capitol, Santa Fé, July 8-9. Sec., Dr. J. A. Massie.

NEW YORK: June 25-28. Chief of Examinations Division, Mr. Harlan H. Horner, Department of Education, Albany.

NORTH DAKOTA: University of North Dakota, Grand Forks, July 2. Sec., Dr. G. M. Williamson, Grand Forks.

OKLAHOMA: Oklahoma City, July 9. Sec., Dr. J. W. Duke, Guthrie.

OREGON: Portland, July 1. Sec., Dr. E. B. McDaniel, 704 Electric Building.

PENNSYLVANIA: Philadelphia, Pittsburgh and Harrisburg, June 24-27. Secretary of Bureau of Medical Education and Licensure, Nathan C. Schaeffer, Harrisburg.

RHODE ISLAND: State House, Providence, July 11. Sec., Dr. Gardner T. Swarts.

SOUTH DAKOTA: Deadwood, July 10. Sec., Dr. L. G. Hill, Watertown.

TEXAS: Austin, June 27-29. Sec., Dr. J. D. Mitchell, Fort Worth.

UTAH: Salt Lake City, July 1-2. Sec., Dr. G. F. Harding, 310 Templeton Building.

VERMONT: Burlington, July 9-11. Sec., Dr. W. Scott Nay, Underhill.

WASHINGTON: High School, Tacoma, July 2. Sec., Dr. F. P. Witter, Traders' Block, Spokane.

WEST VIRGINIA: Capitol Bldg., Charleston, July 8-10. Sec., Dr. H. A. Barbee, Point Pleasant.

WISCONSIN: Madison, July 9-11. Sec., Dr. John M. Beffel, 3200 Clybourn Street, Milwaukee.

## Alabama January Report

Dr. W. H. Sanders, chairman of the Alabama State Board of Medical Examiners, reports the written examination held at Montgomery, Jan. 9-12, 1912. The number of subjects examined in was 10; total number of questions asked, 80; percentage required to pass, 75. The total number of candidates examined was 50, of whom 29 passed, including one osteopath, and 21 failed. The following colleges were represented:

| College | PASSED Year Grad. | Per Cent. |
|---|---|---|
| University of Alabama | (1911) 75, 77, | 77, 82 |
| Birmingham Medical College | (1910) 75; (1911) 78, 78, | 78, 79, 80, 83. |
| Atlanta School of Medicine | (1910) | 75 |
| Bennett Medical College, Chicago | (1911) | 80 |
| Northwestern University Medical School | (1910) | 88 |
| Rush Medical College | (1911) | 86 |
| Kentucky School of Medicine | (1907) | 79 |
| Tulane University of Louisiana | (1907) 87; (1911) | 75, 76 |
| University of Maryland | (1904) | 76 |
| University and Bellevue Hospital Medical College | (1911) | 87 |
| Ohio-Miami Medical College | (1911) | 82 |
| Woman's Medical College of Pennsylvania | (1876) | 75 |
| Universities of Nashville and Tennessee | (1911) | 81, 85 |
| Meharry Medical College | (1911) | 78 |
| University of Nashville | (1908) | 82 |
| Vanderbilt University | (1911) | 76 |

| College | FAILED | |
|---|---|---|
| Birmingham Medical College | (1910) 71; (1911) | 66 |
| Howard University, Washington, D. C. | (1910) | 73 |
| Atlanta School of Medicine | (1911) | 62 |
| Medical College of Georgia | (1911) | 54 |
| Louisville National Medical College | (1910) | 60 |
| Tulane University of Louisiana | (1909) 71; (1910) 59, 70; | (1911) 67, 70. |
| Leonard Medical School | (1910) | 68 |
| University of Tennessee | (1908) | 70 |
| University of the South | (1907) | 64 |
| Chattanooga Medical College | (1908) 67; (1910) | 62 |
| Vanderbilt University | (1911) | 66 |
| Meharry Medical College | (1910) | 67 |
| Memphis Hospital Medical College | (1910) 66, 66; (1911) | 66 |

## California April Report

Dr. Charles L. Tisdale, secretary of the California State Board of Medical Examiners, reports the written examination held at San Francisco, April 2-5, 1912. The number of subjects examined in was 10; total number of questions asked, 100; percentage required to pass, 75. The total number of candidates examined was 79, of whom 56 passed, including 9 osteopaths, and 23 failed, including 5 osteopaths. Two other candidates were licensed on the basis of honorable discharge from United States services. The following colleges were represented:

| College | PASSED Year Grad. | Per Cent. |
|---|---|---|
| Cooper Medical College, San Francisco | (1911) 77.5, | 87.6 |
| University of California | (1910) 82.4; (1911) | 85.4, 86.2 |
| College of P. and S., Los Angeles | (1910) | 80.2 |
| University of Colorado | (1897) 86.6; (1911) | 82.7 |
| Denver and Gross College of Medicine | (1904) | 83.1 |
| Denver College of Medicine | (1891) | 85.6 |
| George Washington University | (1907) | 77.9 |
| College of Physicians and Surgeons, Chicago | (1888) 88.5; (1893) 80; (1904) 76.2; (1905) 79.3; (1908) 77.4. | |
| Rush Medical College | (1911) 79.4, | 81, 81.1 |
| Northwestern University Medical School | (1911) | 75 |
| Hering Medical College | (1910) | 75 |
| Indiana University, School of Medicine | (1909) | 75 |
| State University of Iowa, College of Medicine | (1900) 82.4; (1901) 80; (1908) 80.9. | |
| University of Maryland | (1910) | 86 |
| University of Michigan, Dept. of Med. and Surg. | (1892) 87.6; (1904) 76.1; (1911) 88. | |
| University of Minnesota, Coll. of Med. and Surg. | (1899) 85.4; (1908) 88.7. | |
| Missouri Medical College | (1899) | 87.1 |
| Washington University, St. Louis | (1897) | 93 |
| John A. Creighton Medical College | (1910) | 82.9 |
| Albany Medical College | (1902) | 97.5 |
| Columbia University, College of Physicians and Surgeons | (1896) 78.6; (1905) 83.9; (1907) 78.7. | |
| Eclectic Medical Institute, Cincinnati | (1899) | 86.1 |
| Cleveland College of Physicians and Surgeons | (1910) | 76.3 |
| Hahnemann Med Coll. and Hospital, Philadelphia | (1894) | 76.6 |
| Medico-Chirurgical College, Philadelphia | (1906) | 78.6 |
| Jefferson Medical College | (1906) | 75 |
| University of Nashville | (1909) | 81.3 |
| Marquette University, Milwaukee | (1897) | 8.8 |
| University of Athens, Greece | (1899) | 80 |
| University of Naples, Italy | (1903) | 86.4 |

| College | FAILED | |
|---|---|---|
| College of P. and S., San Francisco | (1911) | 69.5 |
| Keokuk Medical College, College of P. and S. | (1903) | 59.5 |
| University of Louisville | (1905) | 65.6 |
| Hospital College of Medicine, Louisville | (1906) | 72.8 |
| College of P. and S., Baltimore | (1882) | 64.5 |
| Detroit College of Medicine | (1894) | 71.3 |
| American Medical College, St. Louis | (1899) | 67.7 |
| Washington University, St. Louis | (1905) | 68.6 |
| Barnes Medical College | (1893) | 52.5 |
| Marion Sims College of Medicine | (1897) | 67.7 |
| New York University Medical College | (1893) | 68.6 |
| Cincinnati Medical College | (1903) | 57 |
| Starling Medical College | (1903) | 63.8 |
| University of Oregon | (1905) | 67.1 |
| Medico-Chirurgical College, Philadelphia | (1895) | 68.1 |
| University of Pennsylvania | (1879) 77.2;* | (1902) 74.1 |
| University of Naples, Italy | (1903) | 49 |

* Fell below 60 in one or more branches.

The following questions were asked:

ANATOMY

Answer ten questions only. 1. Discuss the deep epigastric artery, giving its origin, course, branches and principal structures with which it is in relation. 2. Describe the relationship of the bony points of the elbow when forearm is fully extended and when forearm is in extreme flexion. 3. Describe the renal circulation. 4. Give the distribution of the following intercostal nerves, second, sixth, seventh, tenth and twelfth. 5. Describe the azygos veins. 6. Describe the lymphatics of the mediastinum. 7. Describe the popliteal space, giving boundaries, relations and contents. 8. Describe the origin, course and distribution of the phrenic nerve. 9. Discuss the anatomy of the appendix as an etiologic factor in causing appendicitis. 10. Describe the vesical trigone. 11. Describe (a) the internal abdominal ring; (b) the external abdominal ring. 12. Give the relations of the common carotid artery in the neck.

BACTERIOLOGY

Answer ten questions only. 1. How is the material obtained which is used to counteract the effect of the bite of a rabid dog? 2. What rôle do bacteria play in the production of ptomaines? 3. What happens if a rabbit is infected with a virulent culture of *Bacillus anthracis*? Explain in detail. 4. What produces glanders, relapsing fever, plague, osteomyelitis, favus? 5. How does tetanus toxin injected into a muscle produce muscular spasm? 6. Define complement, amboceptor, symbiosis, endotoxin, antigen. 7. State how you would determine the nature of a dysentery. Give detail of findings. 8. How does the hookworm usually gain access to the intestine? Give two ways. 9. Discuss, not over one page, *Spirochæta pallida*. 10. How would you determine the presence or absence of pathogenic germs in a punctured wound? 11. How do tapeworms propagate? 12. How would you distinguish between a case of tertian malarial fever and one of estivo-autumnal fever? Describe findings.

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### CHEMISTRY AND TOXICOLOGY

Answer ten questions only. 1. Name and describe the chief compounds of sodium. 2. What reaction takes place when carbon dioxid and lime water are brought together? Give the equation. 3. Give the properties of chlorin. State its source and mention the most important of its compounds that are used in medicine. 4. Describe four tests for ammonia. 5. Give the chemical formula and chemical name of laughing-gas. How is the compound made? 6. How would you combine cream of tartar, baking-soda and cornstarch to make baking-powder? 7. How do you determine whether a given white powder is $HgCl$ or $HgCl_2$? 8. Describe collodion and celluloid. 9. Name the three classes of carbohydrates; what compounds do they include? 10. How is oxalic acid made? What is the antidote for oxalic poisoning? 11. Give two methods for distinguishing tartaric acid from citric acid. 12. What antidote, and in what quantity, should be given for poisoning by iodin? By lunar caustic?

### GENERAL DIAGNOSIS

Do not give pathology or treatment unless necessary for diagnosis. 1. Give the etiology and symptoms of acute pulmonary edema. 2. Differentiate hydrocele from inguinal hernia. 3. (a) What may cause enlargement of the cervical lymphatic glands? (b) Give differential diagnosis between any two of these conditions. 4. Differentiate osteomyelitis of a long bone from acute rheumatism. 5. Describe the appearance of the eruption in (a) measles; (b) scarlet fever; (c) rubella; (d) herpes zoster; (e) urticaria. 6. Describe manic-depressive insanity. 7. Describe a typical attack of croupous pneumonia. 8. Describe epidemic cerebrospinal meningitis. 9. (a) What diseases show a low hemoglobin index? (b) Give the diagnosis of uncinariasis. 10. Describe a complete method for examination of the chest when pulmonary tuberculosis is suspected. 11. Describe the tuberculin tests. Discuss their value briefly. 12. Define (a) embolism; (b) thrombosis. Give symptoms of pulmonary embolism.

### GYNECOLOGY

Answer ten questions only. 1. How would you differentiate phlegmonous vulvitis from pudendal hernia? 2. Pointed condylomata, diagnosis and etiology. 3. How would you differentiate a small ovarian cyst from an inflammatory exudation on the broad ligament? 4. What are the methods of replacing the retroverted or retroflexed uterus when movable? 5. Differentiate impaction of feces, pelvic peritonitis and cellulitis. 6. What is the pathology of (a) hydrosalpinx; (b) hematosalpinx diagnosis? 7. How would you differentiate inversion of the uterus from a polypus? 8. What are the results of neglected inversion of the uterus? 9. Mention some of the causes of sterility in women. 10. What are the precautions to be observed in the employment of a pessary? 11. A hot vaginal douche. For what is it used? How administered? Give technic. 12. What are the symptoms of atresia vaginæ?

### HISTOLOGY

Answer eight questions only. 1. (a) Name the stages into which the process of karyokinesis is divided; (b) describe the formation of the acromatic spindle. 2. What features would enable you to distinguish a section made transversely to the tip of the tongue from one made perpendicularly through the skin and subcutaneous tissue of the back of the hand? Make drawings. 3. Describe the histologic characteristics of a longitudinal section of the trachea made perpendicularly to the surface of the mucous membrane. Make drawing. 4. What do you understand by the following terms: (a) neurone, (b) dendrite, (c) axone, (d) implantation cone, (e) tigroid granules? 5. Describe the relation that exists between the small stellate and the cells of Purkinje in the molecular layer of the cerebellum. Make drawings. 6. Describe the distribution of the branches of the renal artery in the kidney. 7. Describe a section made perpendicularly through a solitary lymph follicle such as is found in the colon. Make drawing. 8. Name and describe the different species of cartilage found in the human body. Name a location where an example of each may be found. Make drawings. 9. Name the structures found in the portal canals of the liver. Make a sketch showing the difference in structure, size and relative position. 10. Name and describe the different varieties of white blood-cells. Illustrate by drawings. 11 and 12. Identify two slides.

### HYGIENE

Answer ten questions only. 1. What conditions, climatic and social, should be thought of in reference to a locality to which you would send a pulmonary tuberculosis? 2. What are some of the sequelæ of constipation? What hygienic and dietary regimen would you recommend to prevent constipation? What weight of feces should the normal man pass in twenty-four hours? 3. Name three mineral springs resorts in the United States (preferably in California) with brief statements of the special virtues of each. 4. What are the arguments for and against cremation as a method of disposing of the dead? 5. Name three species of tapeworm of which man is the host. In what food are they found? 6. Describe hookworm. In what section of the country is it most prevalent? What should be done to prevent it? 7. What is the object and modus operandi of traps on waste pipes? How does sewer gas act inimicably to health? What are the symptoms of sewer gas poisoning? 8. What is the period of quarantine required after the latest exposure to infection in (1) small-pox; (2) scarlet fever; (3) diphtheria? 9. State the methods by which typhoid fever may be transmitted. 10. Define the meaning of the terms endemic, epidemic and sporadic. 11. What is the most important requirement that should be made by the state and municipality in order to maintain a pure milk supply? 12. Name four men whose discoveries during the eighteenth and nineteenth centuries did the most toward the protection of the health of mankind.

### OBSTETRICS

Answer ten questions only. 1. What are the (a) primary and (b) secondary dangers of ectopic gestation? 2. Discuss the matter of cesarean section in presence of sepsis or in suspect cases. What other alternatives have you? 3. What is the greatest danger from retained placental remains after delivery? 4. What are the four cardinal points of presentation? Give number into which each are divided. 5. What do you understand by a compound presentation, and how would you manage it? 6. Give the number and names of the joints of the obstetric pelvis. 7. In gonorrhea or suspect cases what means during labor would you pursue to avoid puerperal infection? 8. Describe the delivery of the shoulders in head presentation where the perineum is threatened. 9. How would you differentiate between septic lymphangeitis and septic phlebitis in the puerperal stage? 10. Discuss the matter of craniotomy on living child. When, if ever, are you justified? 11. Give the attachments of the peritoneum to the uterus. What are the other supports of the uterus? 12. Describe the mode of an intra-uterine irrigation following labor, and give conditions justifying or demanding this measure.

### PATHOLOGY

Answer eight questions only and identify four slides. 1. Of what is pus composed? Describe its formation and development. 2. After traumatic injuries, name three structures or tissues which are likely to be replaced by normal tissues and three which will be replaced largely or entirely by scar tissue. How will this scar tissue differ from normal tissue? 3. After death from long-continued or chronic malarial poisoning, what organic changes will be found? 4. Describe the structural or organic changes which take place in the heart as the result of arteriosclerotic disease of the coronary arteries. 5. What organic changes are likely to result from severe and long continued asthma? 6. How does the condition in bronchial pneumonia differ from the condition found in lobar-pneumonia, and what differences, if any, in the causes producing these two conditions? 7. Locate and describe the changes which occur in Landry's paralysis (acute ascending paralysis) and name principal causes. 8. Locate and describe the changes in multiple neuritis and give the principal causes. 9. Describe the changes in the skin in acute and chronic eczema. 10. Discuss the relationship between arteriosclerosis and chronic interstitial nephritis.

### PHYSIOLOGY

Answer ten questions only. 1. What changes take place in the neuron on the central side of a lesion? 2. Discuss the inhibition of reflexes. 3. Give proofs of the existence of sensory nerves in muscles. 4. Describe the (a) accommodation reflex; (b) light reflex of the sphincter pupillæ. 5. What are the functions of the leukocytes and under what normal conditions is there a variation in number? 6. From what and how is lymph derived? 7. What causes the tonicity of the heart muscle? 8. Describe the aspiratory action of the thorax. 9. Describe the nervous mechanism of vomiting. 10. What are the functions of saliva? 11. What is the function of the parathyroids? 12. What are the functions of carbohydrate food?

# Medicolegal

## Injunction Against Stable Not Licensed by Board of Health

*(Trowbridge et al. vs. Tupper (Mass.), 98 N. E. R. 1096)*

The Supreme Judicial Court of Massachusetts holds that the proposed use of a building as a stable could be enjoined after the board of health of the city of Worcester had refused a license therefor. The court says that it has held constitutional the statute of that state which makes it unlawful for any person to "erect, occupy or use for a stable any building in a city whose population exceeds 25,000, unless such use is licensed by the board of health of said city, and in such case only to the extent so licensed," while jurisdiction in equity is conferred on the superior court "to restrain such erection, occupation or use." The statute was designed to protect the health and comfort of the community and should receive a construction which the plain meaning of the words imports. If there is reasonable certainty that a building is to be unlawfully occupied and used for the stabling of horses, the public authorities need not delay action until the purpose of the owner, or those in control, has been accomplished, but may, under the last provision quoted, prevent the attempted creation of a statutory nuisance, even if no actual injury to the public has been inflicted.

The evidence in this case justified the finding of the judge, that it was the defendant's intention to occupy and use, as a stable for horses, the building which he had erected, and whether the board of health acted arbitrarily and unjustly in refusing him a license could not be reviewed in these proceedings for injunction against such use. Nor was evidence of the excellent sanitary conditions of the building, or of its complete plumbing and appointments and mode of construction, or that stables of other persons located in more densely populated sections of the city had been licensed, admissible. The statute makes no distinction of this nature, and if the board in the instances to which the defendant referred had exhibited partiality, or want of sound judgment, the defendant was answerable only for his failure to comply with the law, to which the board's alleged delinquencies were no defense.

Under the statute a criminal prosecution could be instituted only in the name of the commonwealth, or if an information in equity had been presented it must have been in the name of the attorney general. The authority to preserve the health of the inhabitants is lodged in the municipality, and the

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members of the board are officers of the city. It is for this reason that suits to enforce the orders of a board of health for the removal, suppression and abatement of a nuisance, or for its prevention, have uniformly been brought in the name of the city or town, since the decision in Winthrop vs. Farrar, 11 Allen, 398. The plaintiffs in this case were described and prosecuted as a board of health, but the bill was in effect in behalf of the city of Worcester, so that it might be amended to make the city in form the plaintiff.

### Defective Complaint in Action for Malpractice in Prescribing Heroin

*(Billesbach vs. Larkey (Cal.), 120 Pac. R. 31)*

The Supreme Court of California affirms a judgment rendered for the defendant, after his special demurrer to the third amended complaint was sustained, and leave to amend further was refused. The complaint alleged that the defendant was a physician and was employed to cure the named plaintiff of a malady from which she was suffering. In the course of his professional duties toward her he gave her a prescription for the taking of heroin. It was alleged that he "carelessly and negligently" did that, but there was no fact alleged tending to show wherein the prescription was improperly or carelessly given in the first instance. The only negligent act set forth was that after she had been taking that drug for some two months, getting the prescription refilled at a drug-store, as needed, the druggist refused to refill it again without special authority from the defendant, and that thereupon the defendant carelessly, unskilfully and negligently instructed the druggist to refill the prescription for her whenever she wanted it, without bothering the defendant each time, and that he did not revoke that instruction for more than a year thereafter, and that the plaintiff, being ignorant of the deleterious effect of the drug, continued to get the prescription refilled and to take the drug for fourteen months thereafter, whereby she was made sick and weak and was seriously injured in body and mind. The court says that while the pleading might be sufficient to withstand a general demurrer, the court could not regard it as sufficient to inform the defendant of the particular act of negligence charged against him, when the objection was taken by a special demurrer pointing out the uncertainty. The complaint was clearly defective in that it could not be determined from it whether the heroin was negligently and improperly prescribed for the malady, or whether it was properly prescribed for the malady, but was directed by the prescription to be taken in an improper manner, or in improper quantities, or with improper frequency. It did not give, or attempt to state, the contents or substance of the prescription. It did not allege how often or in what quantities the drug was to be taken, nor how often or in what quantities it was taken. It did not aver that heroin was not adapted to the cure or alleviation of the disease from which the plaintiff was suffering. It is one thing to give medicine in an improper manner, another thing to give it too often, another thing to give it in too large quantities, and still another to direct or permit its use to be too long continued. The proof which would meet one of these charges might be essentially different from that necessary to meet another. The defendant had a right to demand that the plaintiff inform him which of these acts constituted the negligence charged against him.

### Medical Witnesses for Plaintiff Only

*(Grant vs. New Orleans Railway and Light Co. (La.), 56 So. R. 897)*

The Supreme Court of Louisiana holds that where a woman, suing for damages for personal injuries resulting from an accident, has the benefit of the testimony of medical men, selected by her, as to her actual condition just after the accident, and at the time of the trial, and the defendant is denied such benefit, by reason of her objecting to an examination by physicians selected by it, or appointed by the court, the testimony of the plaintiff's witnesses stands much on the same footing as would that of an expert accountant, named by one litigant, in a case in which the other litigant had been denied all access to the account constituting the subject of the litigation.

# Society Proceedings

## COMING MEETINGS

Michigan State Medical Society, Muskegon, July 10-11.
Washington, Idaho and Oregon associations, Portland, July 5-8.
West Virginia State Medical Association, Webster Springs, July 10-12.

## STATE MEDICAL SOCIETY OF WISCONSIN

*Sixty-Sixth Annual Meeting, held at Wausau, May 21-24, 1912*

The President, DR. JOHN M. DODD, Ashland, in the Chair

A list of the newly elected officers was published in THE JOURNAL,

### Gonorrhea, with Special Reference to Its Prophylaxis and Sequelæ

DR. CHESTER M. ECHOLS, Milwaukee: Women suffering from gonorrhea may be grouped into three classes: (a) public prostitutes; (b) more respectable women who acquire the disease through clandestine relations; (c) the innocent. It is impossible to eliminate gonorrhea by regular examination by physicians. Medical supervision has proved a fiasco in the large Continental cities. We have no definite or certain cure for gonorrhea. Prophylaxis should be secured by warning those suffering from gonorrhea against marrying. Individual instruction is valuable as a prophylactic measure. Surgical sequelæ of gonorrhea in women can largely be prevented by rest in bed, with proper local treatment.

DISCUSSION

DR. WILLIAM F. WHYTE, Watertown: Municipal registration and examination do not prevent the disease. This has been proved by the situation in Vienna and other continental cities. Careless inspection and difficulty of diagnosis are the cause. Moral and religious teaching and the avoidance of the saloon are the best means of prophylaxis.

DR. HORACE M. BROWN, Milwaukee: Ignorance of immigrants is a frequent cause of the spread of venereal disease.

DR. CARL W. DOEGE, Marshfield: Gonorrheal salpingitis may sometimes be cured so that the patient may bear children.

### The Value of Overriding as a Method of Curing Diphtheria Carriers

DR. W. F. LORENZ and DR. M. P. RAVENEL, Madison: In many cases of diphtheria germs persist in the throat for long periods of time in spite of use of antiseptic gargles and washes. In such cases they transmit the disease to others. Overriding with cultures of *Staphylococcus aureus* was proposed by Schiotz in 1909. It has been successfully tried a number of times. The State Hygienic Laboratory issues such cultures free. In the clinical employment of the staphylococcus spray, untoward effects or sequelæ were absent.

DISCUSSION

DR. C. A. HARPER, Madison: The method is a very valuable and effective one, as our experience has proved.

DR. CHARLES GORST, Mendota: Ordinarily the staphylococcus spray will destroy the germs of diphtheria in the throat of a carrier.

DR. M. P. RAVENEL, Madison: The cultures used are very virulent.

### Differential Diagnosis Between Those Conditions Simulating the Symptom-Complex of Neurasthenia

DR. ARTHUR W. ROGERS, Oconomowoc: Diagnosis is frequently difficult and requires repeated examination and daily observation. On proper interpretation of the significance of symptoms in many of the incipient cases depends the outcome. Neurasthenia is a fatigue neurosis. Distinguish between neurasthenia and paresis. Do not confuse neurasthenia with true hysteria. The most important morbid condition which is sometimes confused with neurasthenia is dementia præcox. The syndrome of dementia præcox begins in childhood, and we are dealing with a mental disturbance, while neurasthenia is more often a disease of mature years. Treatment depends not only on the diagnosis but on the prognosis. A more careful and intelligent consideration of mental diseases will

develop greater prophylactic measures and increase the proportion of recoveries among the insane.

DISCUSSION

DR. A. J. PATEK, Milwaukee: The especial point to be considered is prophylaxis. It is a grave error to consider and treat mental diseases as purely functional. Hysterical symptoms frequently mask organic conditions. Mental symptoms should be treated prophylactically. Symptoms of dementia præcox should be recognized and treated early. Diseases of the mind should not be regarded or treated as functional.

DR. E. F. LORENZ, Madison: Early recognition of the treatment of the condition is all important. Various tests should be used to differentiate carefully between neurasthenia and dementia præcox.

DR. CHARLES GORST, Mendota: In Mendota we have a hospital for the insane. We try to employ the best methods of treatment, avoiding restraint and the use of quieting drugs. Our percentage of cures is large. Early treatment is the basis of recovery.

### Antityphoid Vaccination, Its Use and Value

DR. M. P. RAVENEL, Madison: The vaccine is injected under the skin by means of an ordinary hypodermic syringe. The general symptoms are headache and malaise, with a moderate amount of fever for twenty-four hours. No bad results have been noted. Injections should only be made in those who are healthy and free from fever. The vaccine is borne well by women and children. The period of immunization is about two and one-half years. The dead germs in the vaccine are destroyed in the tissues and no vaccinated person could become a carrier.

DISCUSSION

DR. L. M. WARFIELD, Wauwatosa: I do not believe that we make any mistake when we vaccinate all individuals who are exposed to typhoid, provided we do not vaccinate individuals already ill with the disease. In vaccinating one is really giving the fever in a mild form.

DR. EDWARD EVANS, LaCrosse: I would make two points: 1. Use only two injections if effective. 2. Do not make the injection into the abdomen.

DR. C. A. HARPER, Madison: Antityphoid vaccination is a great benefit. Typhoid is on the increase, especially in the country districts and in the South.

### The Auscultatory Blood-Pressure Phenomenon

DR. LOUIS M. WARFIELD, Wauwatosa: The sounds at present differentiated are known as phases. The first phase is a sharp sound; the second has a murmur with a rapid sharp sound, the third, a loud, snappy sound; the fourth, a sudden transition from former to an appreciable dull sound; the fifth is disappearance of all sound. A loud third phase indicates a strongly acting heart.

DISCUSSION

DR. A. J. PATEK, Milwaukee: The value of peripheral resistance is too little understood. Any instrument that will enable us to put a proper value on the heart's functioning capacity is going to be the instrument of the future.

DR. L. M. WARFIELD, Wauwatosa: The bell of the stethoscope should not be more than 20 mm. in diameter. The auscultatory method referred to in the paper is impossible to follow where there is any great amount of noise.

### A City Health Department

DR. J. M. FÜRSTMAN, LaCrosse: City health departments should do preventive work and should be under the charge of a health officer, who should receive sufficient compensation to enable him to devote all his attention to the work. Politics should be eliminated. Proper laboratory facilities should be given. The health officer should be a physician of special training in sanitation and hygiene. Contagious diseases should be systematically investigated and kept down. Milk should be inspected carefully. There should be medical inspection and supervision of schools. Insanitary conditions should be eliminated.

DISCUSSION

DR. H. E. DEARHOLT, Milwaukee: Communicable disease is a problem of community life, and the responsibility lies with the government. State, county and city governments have been absurdly niggardly in the employment and payment of health officers. The best men possible should be secured, and they should be paid sufficiently so that they will devote their exclusive attention to the work.

DR. J. H. WHITE, U. S. P. H. and M.-H. Service: Competent, exclusive and well-paid service by health officers is the solution of the problem.

DR. G. E. SEAMAN, Milwaukee: A course of instruction in public health has been organized in the University of Wisconsin, from which much good is expected to be derived. There will soon be an active demand for trained sanitarians, and the course in the university should be well patronized.

DR. EDWARD EVANS, LaCrosse: In LaCrosse a health department has been established, which is doing splendid work, and is absolutely independent of politics.

DR. G. WINDESHEIM, Kenosha: Kenosha has just established a public health department on model lines, from which much is expected. We will employ as health officer a graduate of the public health course in the University of Wisconsin.

### The Growing Importance of Preventive Medicine

DR. JOSEPH H. WHITE, U. S. P. H. and M.-H. Service: Preventive medicine has become a positive duty. All the people must be educated to our aims. The places of human habitation must be drained. Refuse must be rendered harmless, and polluted water must not be permitted; infectious patients must be isolated, homes must be screened, children should be schooled in the laws of health. In our educational work we must reach all the people. The work of the medical scientist is supplemented by the work of the practical sanitary engineer. We should find a way to prevent pollution of our soils. The sanatorium is the best and truest friend of the people.

### The Pathology and Diagnosis of Acute Surgical Diseases of the Abdomen

DR. D. R. CONNELL, Beloit: The most common of these diseases are acute appendicitis, ruptured extra-uterine pregnancy, ulcer of the stomach and duodenum, acute surgical diseases of the pancreas and the gall-bladder and its ducts, strangulation of the intestine and Lane's kink. Pancreatitis is a much more common disease than was formerly supposed, and we are now in about the same stage as regards that disease that we were twenty years ago in respect to appendicitis. Early and accurate diagnosis is of the utmost importance.

### Symptoms and Diagnosis of Pathologic Conditions of the Cecum and Terminal Ileum

DR. NEIL ANDREWS, Oshkosh: The pathologic condition refers to what is known as Lane's kink, Binnil's pericolitis, Jackson's membrane, cecum mobile and inflammation of the appendix. The symptoms are well defined, and consist of pain, tenderness on pressure, constipation, indigestion, retardation of food through the intestinal tract. In diagnosis one must differentiate it from salpingitis on the right side, ovaritis, movable and tender kidney and cholecystitis.

DISCUSSION

DR. W. W. KELLY, Green Bay: We are not justified in interfering with these abnormal bands, unless we are satisfied that they are producing conditions which lead to interference with normal function.

DR. C. H. NIMS, Oshkosh: The bismuth meal, permitting the use of the *x*-ray, is a most important means of diagnosis. Under normal conditions the passage of this meal through the alimentary canal is characterized by great precision with reference to time, and any interference with that precision is indicative of abnormal conditions.

### National Importance of Eugenics

DR. FRANK I. DRAKE, Madison: Public and private philanthropy have failed to check the growth of degeneracy. Stirpiculture should be the watchword of the future. Knowledge of human biology is requisite for enlightened statesmanship.

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## COLLEGE OF PHYSICIANS OF PHILADELPHIA

*Meeting held May 1, 1912*

The President, DR. GEORGE E. DESCHWEINITZ, in the Chair

### A Year's Work in Appendicitis

DR. JOHN B. DEAVER: During the past year I have removed 561 chronically diseased appendices without a death. In the same time there have been 356 cases of acute appendicitis with eight deaths. It is not long since we all thought that a purge should be administered in the initial stages of the disease, but we have come to realize that the contents of the bowel play practically no part in the continuation of the disease, while the peristalsis induced by purgation has proved to be a most unfavorable factor, defeating the end and principle on which our treatment is based—anatomic and physiologic rest. The purgative is more deadly than the scalpel. Among 259 adults there were seventy-nine who had a history of being purged before admission. Of these seventy-nine all but two, at the time of operation, showed appendices that were either perforated, gangrenous, acutely ulcerated or surrounded by an abscess. Among the seven patients in the series who died, five were purged before admission; 97.5 per cent. of those drastically purged showed the severest kinds of appendicular disease. Among 100 children the same rule holds. Especial care is necessary in the treatment of appendicitis in children. It is frequently overlooked because of the prevalence of colics and gastro-intestinal derangements among the young.

The medical treatment of acute appendicitis, in my opinion, consists of diagnosis, avoidance of purgative or laxative medicine, the institution of anatomic and physiologic rest, and immediate preparation for removal of the appendix.

Anatomic and physiologic rest are secured by the following measures: (1) Complete rest, preferably in the sitting posture to aid in the gravitation of exudates, if any, toward the pelvis. (2) Absolute prohibition of anything by mouth, including water and ice, as well as nourishment, in order to quiet peristalsis. (3) Gastric lavage to relieve the stomach of accumulated fluids, preventing in large degree toxemia, vomiting and peristalsis. (4) The constant instillation of normal salt solution by rectum, according to the method devised by Murphy. This diminishes thirst and supplies the need of water. (5) Ice-bag over the abdomen to quiet pain, to assist in keeping the patient quiet and more particularly to discourage meddling examinations. Drugs are not necessary; usually they are disadvantageous. When morphin is necessary it should be given only in a minimum dose after decision for operation has been made. In the rare cases in which operation is impossible it may, of course, be given in accordance with the indications.

In the treatment of periappendicular abscess I still believe in the method of extraperitoneal approach when feasible. Many abscesses have as a part of their retaining wall the parietal peritoneum of the right iliac fossa or the loin. Here a safer and simpler plan is to open directly into the abscess through the abdominal wall. The proposal to relieve all adhesions is contrary to reason and results. It is drainage rather than the breaking up of adhesions that cures. We cure best when we work with Nature rather than flout her efforts and substitute our own works for those of our Creator.

As a corollary to this attitude regarding periappendicular abscess I take issue with those surgeons who never leave the appendix. In the 356 operative cases of acute appendicitis the appendix was not removed in fifteen cases (4.2 per cent.). It need not be left in any patient whose abdomen can be closed so securely as to obviate incisional hernia. Even were it possible by removal of the appendix to secure better closure I would not remove it in certain cases. I always make an effort to find the appendix, but there is a limit beyond which I will not go even in the interest of thoroughness, believing that a living patient with an appendix is better than a dead patient without an appendix.

In cases of spreading peritonitis which is still local we should operate at once. If we fail to operate in this early stage diffuse peritonitis is likely to result, and from an experience covering the whole development of the modern treatment of peritonitis I say that we cannot treat this condition by operation. I have washed, wiped, drained with gauze, tubes, employed antiseptics, and run the gamut of active procedures proposed for treatment, and I can only echo the words of an English surgeon that "the more thorough the operation, the more quickly the patient dies." Masterly inactivity with appropriate treatment will tide the patients over the crisis, allow victory in the remote areas of the peritoneum, and localize the infection in the neighborhood of the appendix, where it may be dealt with to greater advantage and with every prospect of success. The treatment is the same as that already spoken of as anatomic and physiologic rest.

### Death Following Two Cases of Operative Fixation of Fracture of the Shaft of the Femur

DR. JOHN B. ROBERTS, Philadelphia: A man, aged 50, with an alcoholic history, sustained a fracture below the trochanters which was difficult to treat by apparatus. Two days later two metal plates were applied to the bone after exposure through an 8-inch incision. The apposition was obtained by traction exerted by compound pulleys. Suppuration of the wound occurred, and the man died of chronic sepsis complicated with alcoholic delirium about nine weeks later. Another man, aged 60, in good general health, with no alcoholic history obtained, was subjected to operative treatment for comminuted fracture involving the shaft of the femur below the trochanters and the neck. One plate was used to hold the main fragments in position. The operation was done eight days after injury. The patient died of chronic sepsis twenty-one days after operation. Pus was found in the medullary canal and among the muscles.

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## ASSOCIATION OF AMERICAN PHYSICIANS

*Twenty-Seventh Annual Meeting, held at Atlantic City, N. J., May 14-15, 1912*

*(Continued from page 1777)*

### The Symptoms of Acute Coronary Obstruction

DR. JAMES B. HERRICK, Chicago: Sudden obstruction of a coronary artery or any of its large branches is not necessarily fatal, though sudden death often follows such an accident. The view that the coronary arteries are without significant functionating anastomoses is disproved by anatomic studies including stereoscopic skiagraphs of hearts with injected coronaries, and studies of hearts made translucent by special methods. Experiments on lower animals, as well as post-mortem examination on man, prove, not only that anastomoses exist, but also that a sudden obstruction of even a large branch is not necessarily immediately fatal. Clinical observation affords additional proof. An accurate symptomatology of coronary thrombosis cannot be drawn. In some cases death is instantaneous; in others it causes angina pectoris and is followed by rapid cardiac weakness and death. Probably obstruction of smaller branches may be followed by mild precordial pains and comparatively trifling symptoms. Other cases with obstruction of large vessels have a sudden angina-like pain, but death either does not occur or is delayed many hours or days. In these cases, the ones especially under discussion, the pain is extremely severe, like angina, though it may be high in the epigastrium. Shock, collapse, vomiting and tympany make the condition not unlike some abdominal accident such as perforation of gastric ulcer or acute pancreatitis. The pulse is generally rapid, very weak and the heart tones feeble. An acute emphysema at times adds to the difficulties of diagnosis. The mind is commonly clear. An acute pericarditis may occur later. The status anginosus may be present or the pain may leave and the patient feel able to leave the bed. In some instances recovery occurs. In others death follows in a few hours or after several days. It is important that the condition be recognized, as it enables a more accurate prognosis to be made and also leads to a more rational therapy.

especially in the way of prolonged rest and the use of digitalis rather than nitroglycerin.

DISCUSSION

DR. E. LIBMAN, New York: I have been in the habit of classifying lesions we generally meet in the coronary arteries as follows: Besides the recent thrombosis and embolisms there are cases with partial or complete obstruction by plaques. These are specially to be found in men who have been heavy cigar-smokers. If the occlusion by the plaque is incomplete, it may be made complete by a thrombus. In some cases the symptoms are due to a narrowing of the orifice of the arteries by plaques due to atherosclerosis, or puckering. Some patients with closure of the coronary artery live not only for weeks but for months. They present a remarkable facial appearance from which the diagnosis can in some cases be adduced. They have a peculiar dirty, ashen color. Samsom referred to it as "a leaden overcast" (but he believed it to be due to disease of the aorta itself). It is valuable to recognize the condition, when possible, because such patients are apt to succumb at any time and particularly after operative procedures.

### Edema of the Liver with Experimental Nephritis (Cantharidin)

DR. EUGENE L. OPIE, St. Louis: The possibility that changes in the liver have a part in the functional disturbances which accompany nephritis has been suggested by the occurrence of edema of the liver and gall-bladder in association with experimental nephritis caused by cantharidin. By measurement of the lymph-flow from the thoracic duct the attempt has been made to determine the relation of this edema to the production of lymph and to its flow through the lymphatics and sinuses of the lymph-nodes. Coincident with the onset of edema of the liver and gall-bladder there is diminution or complete cessation of the flow of lymph from the thoracic duct. At a later period, about one and a half hours after the administration of the drug, lymph flow from the thoracic duct resumes and then greatly exceeds its normal activity. During the early period of diminished flow histologic examination of the regional lymph-nodes of the liver shows the existence of fibrinous plugs frequently formed about cells (in part endothelial) which have been destroyed by the poison. In view of the occurrence of edema, it is probable that the renal irritant causes from the beginning increased flow of lymph which finally overcomes the obstruction interposed by the occluded lymph-channels. Glycosuria occurs in association with the action of cantharidin and is more marked in proportion to the severity of a proportionate intoxication. Changes in the liver causing liberation of sugar from the liver offer a more plausible explanation than that which refers the appearance of sugar to renal changes. The occurrence of edema of the liver and the increased flow of lymph caused by the renal poison add weight to the view that the edema of nephritis is referable to the poison which causes the renal lesion and is not secondary to disturbances of renal function.

### Clinical Experience in the Drug Treatment of Edema

DR. JOSEPH L. MILLER, Chicago: The drugs selected were digitalis, theocin and strophanthin. The patients had been in the hospital for a week or more so that the element of rest could be largely eliminated. In all the cases of cardiac incompetency, as a rule, digitalis had very little effect on the edema. What we did notice was the marked improvement in dyspnea, which is in contrast with what we found in regard to certain other drugs. In a number of other cases in which we gave strophanthin ampules, containing 0.1 mg., there was only a slight increase in the diuresis. The patients would pass very little more urine. They received great relief from dyspnea. We had ten patients with interstitial nephritis, seven of whom had received digitalis or strophanthin, to whom we gave theocin, four grains, three times a day. The diuresis appeared in from nine to eighteen hours. In these nine cases the average daily output, which had been 644 c.c., increased to 2,105 c.c. after theocin was started. While these patients rapidly got rid of their edema, their dyspnea was not always modified. Here we found that theocin had absolutely no effect. When the kidney has reached the point where it will no longer secrete urine, all of our ordinary measures are of little effect. It was shown that in severe cases in which the kidney fails to secrete fluids it is hard to increase excretion. We used Fischer's solution without success.

DISCUSSION

DR. H. A. HARE, Philadelphia: The remarks which have just been made in regard to our diuretics in renal disease carry out the idea that there could not be secretion if you did not have a glandular tissue that will carry it out. If the secreting tissue is gone, I do not see how we can expect any drug treatment to produce any effect. The more I study the influence of various diuretic drugs on the urinary flow the more convinced I am that, unless at the same time we influence the hepatic function, we will fail to get results. I believe that there is a relation between the liver and the kidney which is much closer than we think at the present time. It is of little value to make the patient pass a large quantity of fluid unless at the same time we can increase the output of solids. A much more efficient way is by purgation or tapping.

DR. F. P. KINNICUTT, New York: My own clinical experience is entirely corroborative of Dr. Miller's experience as to the comparative effect produced by digitalis, strophanthus and theocin. In other words, our experience has been in the use of digitalis and strophanthus in this group of cases that we do not get marked relief in dyspnea, but no increased diuresis. On the contrary, with theocin we get increased diuresis, but without improvement of the dyspnea.

DR. THEODORE C. JANEWAY, New York: Dr. Miller's careful observation on these drugs ought to emphasize the very great importance of kidney function investigations which are being carried on in regard to both water and salt excretion and examination of these test substances. If we could get to the point at which we could discriminate in the group of edemas due to excreting substance and the group of edemas which are due to definite water or salt excretion, it would go very far to simplify the treatment of these patients. The problem of the water and salt management of these cases is a matter of vast importance and complexity. I have seen cases in which the response of salt restriction was admirable. Water is the best diuretic there is if the patient can excrete water.

DR. E. LIBMAN, New York: When the agents discussed by Dr. Miller do not cause diuresis, I am accustomed to try some of the older diuretics, and often a striking result is obtained. I remember a patient, treated by Dr. J. Rudisch ten years ago with oil of juniper, a drug that must be used with great caution. The patient was water-logged for months and all the ordinary diuretics had been used. The juniper caused so marked a diuresis that the edema entirely disappeared, and the patient was doing well when seen several months later. In several cases I have seen splendid results from the use of the infusion of apocynum. I usually give it by rectum, diluted with water.

DR. S. J. MELTZER, New York: Dr. Miller has brought out the fact on the selective action of drugs worth noting. Caffein and digitalis are stimulants for the heart, but caffein causes dilatation of the blood-vessels of the kidney while digitalis does not. It would be very well that physicians give digitalis and caffein together in such cases.

DR. S. SOLIS COHEN, Philadelphia: There is one drug which in my own hands has been quite satisfactory when combined with digitalis, and that is spartein. It has a distinct influence in reducing blood-pressure, in enlarging the volume of the peripheral arteries and markedly increases the flow of urine and solids. It is also the practice of empirical physicians to combine with digitalis one of the vegetable diuretics, preferably potassium citrate, and very much better results can be obtained when these two methods are associated than when either is used alone. I have found it of considerable advantage clinically to rotate in the use of these drugs, using a caffein preparation and spartein, either in alternation or on successive days.

DR. D. L. EDSALL, St. Louis: I would like to ask Dr. Miller if he has seen any positive bad results from theocin. It is the strongest stimulant we have to the renal secretion. I have been rather impressed that in some cases in which there is no

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primary disease it may cause increase in albumin and casts and renal irritation. Does Dr. Miller find that correct?

DR. J. L. MILLER, Chicago: I have never seen any bad results following the use of theocin, except the nausea. It causes marked disturbance in the stomach so that we found it advisable not to administer it for more than two or three days, then to discontinue its use and afterward to begin again. In none of these cases did we find injury to the kidney. In many of these cases the urine was examined microscopically and there was no apparent increase in the blood or character or number of the casts. While it is true that we are taught that it is sometimes dangerous in nephritis to administer strong diuretics, it has been shown that the diuretic action is due to the effect on the blood-supply so that, after all, these drugs may not be dangerous.

### Complete Permanent Heart-Block in Auricular Fibrillation Following the Use of Digitalis

DR. ALBERT E. TAUSSIG, St. Louis: In auricular fibrillation, digitalis slows the pulse by producing partial heart-block, thus interfering with the passage to the ventricle of some of the very numerous and irregular auricular impulses. In some cases, if the digitalis is pushed, complete heart-block may result, with the establishment of the very slow, regular rhythm characteristic of this affection. Ordinarily this condition of complete heart-block is temporary and ceases a few days after the administration of digitalis is discontinued. It may happen, however, if there is an organic lesion interfering with the conductivity of the bundle of His, that the administration of digitalis is followed by the establishment of a complete and permanent heart-block, possibly because the drug gives the *coup de grâce* to the already diseased bundle.

DISCUSSION

DR. H. A. HARE, Philadelphia: If digitalis is given in partial heart-block, there is very great danger of producing complete heart-block. On the contrary, in complete heart-block, digitalis speeds up the ventricle and is a useful remedy.

DR. JAMES TYSON, Philadelphia: I have had very satisfactory results in irregular heart action with atropin, which I have found invaluable; I should substitute it for digitalis in many conditions in which the latter drug is usually given. I think our further knowledge will lead us to use less digitalis in irregular heart cases.

DR. L. F. BARKER, Baltimore: Perhaps we can use digitalis and atropin together very well. Digitalis combines with the heart muscle direct and also combines with the vagus, and is therefore myotrophic and vagotrophic in its effect. When we need digitalis we can give atropin with it and throw out vagotrophic and myotrophic influences.

DR. GEORGE DOCK, St. Louis: In regard to the use of digitalis in such cases, it seems to me important to remember that, if we are making proper examinations, including the use of the polygraph, the use of digitalis is not only safe in these cases, but certain to bring a secure condition to our knowledge. If I am not mistaken about Dr. Mackenzie's work on digitalis in such cases, it is still in the experimental stage. I think he is not entirely satisfied with the use of digitalis in auricular fibrillation, but his work is very carefully and systematically done in order to get light on it. In getting heart-block in such a case one must not too quickly draw the conclusion that the patient has a complete lesion of the His bundle and that ineradicable damage has been done by the digitalis. I do not agree with those who think that one can have symptoms of complete or severe disease of the His bundle without any heart disease at all. I believe that there is a great deal in large doses of strychnin. I reported a few years ago a case in which there were severe symptoms without complete degeneration; then the patient had Stokes-Adams symptoms and remained with permanent heart-block for two years. The man was able to do his work for two years with his pulse always below 30 and died suddenly one night while washing his hands. During that time he was always perfectly well, provided he was taking 1/20 of a grain of strychnin. If he went without it, his pulse would intermit for one-fourth of a minute.

### Clinical and Pathologic Observations on Subacute Bacterial Endocarditis

This paper, by Dr. E. Libman, New York, was also presented before the American Society for the Advancement of Clinical Investigation, a report of which will appear in THE JOURNAL later.

### Acute Rheumatic Fever and the Arteries

DR. OSKAR KLOTZ, Pittsburgh: There appears to be a fairly definite form of arterial disease which is associated with rheumatic fever in its different stages. The arteries react to the irritant in the form of a true inflammation. This reaction is to be observed in the adventitia and the outer portion of the media. In the acute stages the inflammatory exudate is of the non-suppurative variety in which the lymphoid cells are the most prominent, the lesions involving chiefly the smaller arteries, the larger arteries being damaged chiefly by inflammation which travels along the vasa vasorum. The fixed tissues in the neighborhood of the small arterioles are damaged or even destroyed, but abscesses are not formed. In the aorta and heart the destruction involves chiefly the muscle and elastic elements. In the early stages the intima is affected by a slight superficial fatty change and in the chronic stage it proliferates, giving rise to a nodular endarteritis. The repair following the inflammatory process of the media and adventitia is by fibrous tissue. Thus the aorta in chronic rheumatism is disturbed by a patchy fibrosis, or chronic productive mesaortitis, and has, therefore, lost much of its elasticity and may become subject to diffuse dilatation.

### The Clinical Analysis of Some Disturbances of the Autonomic Nervous System

DR. LEWELLYS F. BARKER, Baltimore, and DR. F. J. SLADEN, Baltimore: In eighteen cases we have analyzed the symptoms referable to disturbances of the autonomic system. The autonomic nervous system includes all the paths going to smooth muscles and secreting glands, and embraces both the sympathetic nervous system and the so-called craniosacral autonomic system. The paths between the cerebrospinal axis and the periphery are constructed of at least two neurons, a proximal one with a medullated preganglionic fiber, and a distal one with a non-medullated postganglionic fiber. The connection between the two neurons can be interrupted functionally at the synapse by nicotin. Continuous innervations exist, during life, in each of the two systems, and, normally, the regulation of the reciprocal antagonists is such that a sort of equilibrium is maintained as a resultant of the tonus in both systems. How this tonus is maintained is not known. It seems probable that both neural and clinical influences play a part. Among these eighteen cases there were some patients who were predominantly vagotonic, others who were predominantly sympatheticotonic, and in many of the cases signs of overactivity in each of the two systems were met with, so-called mixed states. Among the clinical signs pointing to excessive tonus in the craniosacral system may be mentioned: A. Mid-brain portion: Contracted pupil, accommodation spasm, wide lid-slits, von Graefe's sign; B. Hind-brain portion: Salivation, lacrimation, bradycardia, slowed conductivity of vagal origin in the His bundle, pulses irregularis respiratorius, vasomotor anginal attacks, hypotension, bronchial asthma, irregular types of breathing, laryngeal crises, inactive gag reflex, hyperacidity and hypermotility of the stomach, cardiospasm and pylorospasm, spastic constipation or nervous diarrhea; C. Sacral portion: Spasm of the anal sphincter, dysuria, due to spasms of the detrusor of the bladder, and certain genital phenomena; D. General: Sweating, eosinophilia, pigmentation, increased carbohydrate tolerance, excessive reaction to pilocarpin, absence of epinephrin glycosuria. That the conception of vagotonie is in accord with earlier therapeutic discoveries, and may help to guide us to a rational therapy in many cases is illustrated by the well known effects of atropin on spasms (e. g., in bronchial asthma, in hyperacidity, in ulcer of the stomach, in gastric crises, etc.). The good effects of atropin in vagus inhibition of the heart and in sweating are well known. The effects of epinephrin

on bronchial asthma, biliary colic and the diarrheas of Basedow's and Addison's diseases are also easily understood in the light of this generalization.

DISCUSSION

DR. S. SOLIS-COHEN, Philadelphia: This admirable exposition confirms some observations of my own. I have recently changed the title under which I placed my cases from vasomotor ataxia to vasomotor autonia. I would like to emphasize the fact that these phenomena are largely ataxic. In my first paper I divided them into spastic, paretic and mixed, and the mixed group is the largest one we see clinically. Graves' disease is the largest group of pure paretic diseases. Raynaud's disease, when pure, is an example of the non-paretic. But even in Graves' disease the phenomena are frequently mixed, and we will find the sympatheticotonic and the vagotonic type mixed in certain cases of apparently extreme types of the nervous system.

DR. L. B. WILSON, Rochester, Minn.: During the last three or four months we have been repeating the work of Gley of the University of Paris, consisting of the injection of extracts of human thyroids into the vascular system of dogs, and we have been able to corroborate it. Gley has been able, not only to produce a fall in blood-pressure by injection of thyroid extract, but also to inhibit the vagus. He has succeeded in doing this only by the injection of fluid from exophthalmic goiters.

### Studies on the Peripheral Pulse

DRS. A. W. HEWLETT, J. G. VAN ZWALUWENBURG and J. H AGNEW, Ann Arbor: This study of the volume of the pulse was made in the arm when the venous outflow was momentarily obstructed by a suitable pressure cuff. In a normal young individual, during exposure to cold, the main portion of the blood enters the arm during the primary systolic pulse-wave, while during the remainder of the pulse-period, little, if any, blood enters the arm. When the individual is comfortably warm, the primary wave is increased in size and most of the blood enters with this wave. When the individual is uncomfortably warm, the primary wave remains large, but the inflow is rapid throughout the whole pulse period. This seems to be due to a relaxation of the finer arterioles. When nitroglycerin is given in medicinal doses, the primary wave is maximal, whether the individual is exposed to heat or cold. In the latter case there is a marked reflux wave immediately following the primary wave. This is due to a relaxation of the main arteries without a corresponding relaxation of the arterioles and can be explained only by a reflection of the pulse wave from the periphery. The large arteries act like an elastic bag from which no adequate outlet through the finer arterioles is possible.

### The Symptomatology and Early Diagnosis of Thrombophlebitis

DR. LEWIS A. CONNER, New York: Among 1,540 cases of typhoid treated in the New York Hospital thrombophlebitis was observed in over 5 per cent., and there is much reason to believe that this figure fails to represent its actual frequency. The condition seems to begin usually in the small veins of the legs and feet, and the classical symptoms of femoral phlebitis may be lacking altogether or appear only late in the course of the affection. Pulmonary embolism and infarction are frequent complications of such thrombophlebitis, and occur usually at an early stage of the affection, often many days before any signs of phlebitis are apparent. Such emboli are almost always small, and seem to come from the newly forming thrombi in veins which are not yet completely occluded. Large, fatal pulmonary emboli are very rare. Among seventy-eight cases of proved thrombophlebitis, pulmonary embolism was observed in twenty-nine (33 per cent.). In two-thirds of these latter cases the pulmonary symptoms appeared before the phlebitis was recognized. The symptoms appear suddenly and may be slight or severe. They include pain, cough, dyspnea, cyanosis, bloody expectoration, etc. The physical signs may be those of a slight, dry pleurisy, of lobar pneumonia or of extensive plastic pleurisy. Pulmonary symptoms suggestive of embolism occurred in a number of cases of typhoid in which no frank signs of phlebitis were observed. It is safe to say that most of the pulmonary and pleural complications of the later weeks of typhoid are of embolic nature and arise from phlebitis, either latent or obvious. The post-typhoid "septic" chills are, in most cases at least, associated with the presence of thrombophlebitis. It seems probable that the condition known as "tender toes" is related in some way to thrombophlebitis in the sole of the foot, as phlebitis and "tender toes" are very frequently associated. It is suggested that "tender toes" may be due to a neuritis of the plantar nerves which is caused by extension of the inflammation of the plantar veins which run in close proximity.

DISCUSSION

DR. F. P. KINNICUTT, New York: Since my attention was called to this condition by Dr. Conner, a study of several cases presenting clinical phenomena similar to those described has convinced me of the probable correctness of the explanation which he offers. In the matter of "tender toes," the consensus of opinion is that it is due to a neuritis, but the suggestion that the neuritis was a secondary process seems very reasonable. The sequence would be a thrombophlebitis, a periphlebitis and extension of the inflammation to the nerve branches immediately contiguous to the affected vein.

DR. E. LIBMAN, New York: For some years I have suspected that the sharp temperature rises and the chills seen in cases of typhoid, particularly toward the latter part of their course, might be due to thromboses. In such cases blood-cultures are often negative.

DR. W. S. THAYER, Baltimore: I have long been interested in the relation between the post-typhoid chill and the unaccountable rise of temperature and later appearance of thrombosis. One point that Dr. Conner has forgotten is the frequency of pulmonary thrombosis in these cases. I have in several instances seen thrombosis of pulmonary arteries and not anywhere else could it be found.

DR. B. SACHS, New York: In the senile and presenile period these conditions are extremely frequent, although very generally overlooked. I am very certain that many of the conditions, not only of moderate paresis, but particularly of pain occurring in older persons, are distinctly due to the condition of thrombophlebitis in the lower extremities. Cases of this sort are also similar to the anatomic conditions found in erythromelalgia. Some years ago it was supposed that the neuritis was the primary condition, but now it is established that thrombophlebitis is the primary condition and the neuritis is entirely secondary.

### Fatal Cases of Postoperative Embolism

DR. LOUIS B. WILSON, Rochester, Minn.: We have tabulated our cases up to September, 1899, and no fatal case of embolism occurred during those ten years. There were over 6,000 major operations done. On Sept. 13, 1899, our first case of septic embolism occurred, and we have had forty-seven in about 57,000 cases. We had one fatal case in over 1,200 operations. Why did we have none in the first 6,000 when we were due to have five? There was no material change in the operators; the same operators were doing the work. There was no change in the anesthetists. There was no material change in the nurses. There was no material change in the anesthetic—ether by the drop method had been used from the beginning; no material change in the convalescence. The patients were all gotten up as soon as possible. That has been the policy of the institution since it was founded. There were two possible reasons which suggested themselves. During the first twelve years of the clinic nearly all operative cases were drawn from the private practice of the staff. Very few referred patients were operated on and consequently those received were operated on earlier than are now referred patients. Second, in going over the regions in which operations were performed, we find that while the average percentage of mortality of all cases during the last twelve years

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has been 0.08 per cent., in operations on the stomach, gall-bladder and intestines it has been three times as large.

### An Experimental Study of the Retention of Foreign Protein by the Kidney

DR. R. M. PEARCE, Philadelphia: Extracts of the kidneys of normal rabbits prepared one, two, three and four days after the intravenous injection of egg-albumin and horse-serum have the power to sensitize guinea-pigs to a second injection of these proteins, the sensitization to first- and second-day extracts being constant and of great degree, that of the third day less marked and sometimes lacking, and of the fourth day only rare and always weak. Comparative studies of the power of the blood, liver and kidney to sensitize indicate that this sensitization depends on the contents of foreign protein in the circulating blood and not on its accumulation or fixation in the tissues of an organ. This opinion is supported by other experiments in which the sensitizing power of the blood and of the extracts of unwashed kidneys was compared with the sensitizing power of extracts of washed kidney. The weak sensitizing power of washed kidney extract is taken as evidence that foreign proteins of the kinds used are not closely bound to the tissues of the kidney, and, if these results may be applied to nephrotoxic protein, it follows that nephritis is not due to selective and persisting fixation of a protein by the renal cells, but is due to the action of such protein merely during the process of its elimination. In experimental acute nephritis of the type due to uranium nitrate, the power of sensitization to that of egg-albumin is prolonged for twenty-four hours and in the chromate type for forty-eight hours, thus indicating that in nephritis, of the acute type at least, the elimination of a foreign protein is delayed. Attempts to study by the same methods the elimination of vegetable and bacterial proteins have failed.

DISCUSSION

DR. M. J. ROSENAU, Boston: It seems to me very clear that this protein matter is in the blood rather than fixed in the tissues of the liver and kidneys. The work interested me from the standpoint of using anaphylaxis, and, as to the use of this as an instrument, I am prompted to throw out the caution that we have as yet no delicate means of determining when anaphylaxis is present or absent. The methods so far are crude. There must be evident indications on the reacting pig before we can say whether the reaction has occurred or not. That is one point in the particular biologic phenomenon which needs to be cleared up in order to make it a more delicate means of determining some of these things for which the reaction is used. Further, it is not a quantitative test at all, merely a qualitative test.

DR. L. F. BARKER, Baltimore: The experiments are very interesting as throwing light on the time required by the protein to go through the kidney. In the normal kidney the length of stay in the epithelium is very short. It is exceedingly interesting to experimental physiologists that the kidney is able and eager to get rid of foreign proteins from the blood. Egg-albumin and bacterial proteins are excreted.

### The Principles of Treatment in Nephritis

DR. MARTIN H. FISCHER, Cincinnati: All the changes that characterize nephritis are colloid-chemical in nature and are due to a common cause, namely, to an abnormal production or accumulation of acid (and substances that act like acid) in the kidney. To this are due the albuminuria, the morphologic changes in the kidney, the associated formation of casts, and the changes in the quantitative output of water and dissolved substances by the kidney. All nephritides are parenchymatous nephritides and differ only in that the changes in some are general (parenchymatous nephritis), while in others they are local (chronic interstitial nephritis). The fact that healthy kidney tissue exists between the patches of parenchymatous nephritis in the latter case accounts for the scarcity of urinary signs in the latter disease. The relief of nephritis depends on a removal of as many as possible of the conditions that are responsible for the abnormal production or accumulation of acid in the kidney, and a direct combating of the acid condition and its effects on the kidney. To this end there are indicated alkali to neutralize the acid, salts, including sodium chlorid, to reduce the effects of the acid on the kidney, and water that this may be present in a "free" state for urine. The generalized edema, the "uremia," etc., which are usually regarded as secondary to the kidney disease are really part and parcel of the same intoxication. They represent in other organs what in the kidney is called nephritis.

DISCUSSION

DR. T. C. JANEWAY, New York: There is one change of rather marked importance, which Dr. Fischer has not duplicated in any way in his acid experiments, which deserves consideration, namely, the presence of fat of a peculiar kind in the tubular epithelium, showing evidence of cell degeneration taking place. Dr. Fischer makes the positive statement that the abstraction of sodium chlorid from the diet of man or animal results in the occurrence of evidence of nephritis or of tubular epithelium degeneration. That is absolutely negatived by some very important experiments reported by Dr. Joslin some years ago (*Arch. Int. Med.*, July, 1908, i, 615).

DR. A. E. TAYLOR, Philadelphia: I was the original subject on whom salt-free diet experiments were conducted. I obtained in my own person effects which were not obtained in the men following my experiment. The point is true that so far as I and the men who followed me were concerned we had no symptoms of nephritis. Although there was a profound disturbance of the body due to salt abstraction, there were no symptoms of nephritis. This is not a fair criticism. It is surprising how animals will resist, at times, salt abstraction and it is possible that, if the experiment were continued over a longer period, the patient would develop the renal lesions which might be due to salt abstraction.

DR. JAMES TYSON, Philadelphia: In quite a long experience I have grown to adopt the administration of alkalies as the very first measure with a view to attacking the symptoms in what is commonly called acute nephritis; not that I am invariably successful, but this method has proved to be the least unsuccessful method in the treatment of these cases. In all the efforts I have made to determine whether abstraction of sodium chlorid reduces edema, I have failed—this, perhaps, from lack of training in scientific accuracy.

### Some Clinical Aspects Observed in the Study of a Thousand Cases of Ulcer of the Stomach and Duodenum

DR. JULIUS FRIEDENWALD, Baltimore: The thousand cases occurred in 12,598 patients affected with various gastric disturbances. The largest proportion occurred in patients between the ages of 20 and 50, and the greatest number between 20 and 30. There were 676 females and 324 males. As to occupation, thirty-one were cooks, eighteen were workers in metal, twelve were workers in porcelain, eight were miners, twenty-eight were tailors, fifteen were shoemakers, nineteen were blacksmiths; a definite history of trauma was elicited in twenty-three cases. Anemia was present in at least 65 per cent. of all cases. A history of alcoholism was obtained in 21.4 per cent.; of syphilis in 5.2 per cent. The gastric secretion presented a normal acidity in 46 per cent., hyperacidity in 30 per cent, subacidity as well as anacidity in 23 per cent.; hyperacidity was proportionately more frequent in females, and subacidity in males. As a rule, in acute ulcers, and especially those accompanied by recent hemorrhage the acidity was high, while in the old chronic forms of ulcer the acidity was low. Pain was present in 94 per cent. of all cases, and was most marked in those accompanied by a hyperchlorhydria. It appeared in 223 instances within the first hour after taking food, in 188 between one and two hours, and in 491 after two hours. An epigastric tender area was present in 908 cases; a tender point to the right or left of the median line in forty-one; a dorsal tender area together with an epigastric tender spot in 523; a dorsal tender area alone in twenty-five; no tender area at all in twenty-six cases. Vomiting occurred in 676 cases. It was proportionately much more frequent in those instances in which pain

appeared early, and in those accompanied by a high acidity. Gastric hemorrhage was present in 228 cases while melena occurred twice as frequently as hematemesis. Of 539 cases in which the feces were examined for occult blood, 467 gave one or more positive reactions.

### Acquired Stenosis of the Duodenum; a Statistical Study with the Report of a New Case

DR. J. M. ANDERS, Philadelphia: The casual conditions are divisible into two groups—benign and malignant. About 20 per cent. of the aggregate number of cases were dependent on malignant disease of the duodenum, pancreas and other adjacent structures. Of the benign forms, the greater number were occasioned by duodenal ulcer. In twenty-nine instances, constriction of the duodenum was the result of compression by the root of the mesentery. Other factors in the production of duodenal stenosis of benign character were peritoneal adhesions and bands, gall-stones, cysts of the pancreas, kinking, hematoma of the pancreas and ovarian cyst. A point of interest is that about 70 per cent. of the cases were of intraduodenal origin.

### Tertiary Syphilis of the Liver

DR. THOMAS MCCRAE, Baltimore: Syphilis of the liver presents a very varied clinical picture with prominent general symptoms in many cases, of which loss in weight is marked. The duration of the symptoms may be prolonged and there may be periods of improvement. Fever is a common occurrence. There are features suggestive of hepatic disease in the majority of the cases. Enlargement or tumor is the most common. This may suggest other conditions, especially malignant disease. General enlargement and the occurrence of nodules or large rounded masses are the most common. A striking feature is the relatively marked enlargement of the left lobe as compared with the right. The diagnosis may be obscured by other diseased conditions or the liver condition may be interpreted wrongly. Ascites is sometimes a difficulty. Knowledge of the features of hepatic syphilis and the therapeutic test are important aids. Treatment can influence the syphilitic process but not its results (cirrhosis, amyloid). The treatment is the usual therapy for syphilis, with especial emphasis placed on the administration of potassium iodid. In many of the cases this alone was given with a perfect result. No difference could be observed when mercury was added, but it seems wise to give both drugs. Dramatic results, such as almost immediate disappearance of the fever, reduction in the size of the liver and nodules, and rapid gain in the general state and weight, were seen when iodid alone was given. One patient gained 25 pounds in a month. Salvarsan was given to three patients, in doses of 0.5 or 0.6 gram, and in two of these mercury and iodid were not given in order that the effect could be watched. Improvement followed in both cases but not so rapidly as was the case with iodid alone or mercury and iodid. In the third case all three were given. We must recognize that in some cases, while we can influence the syphilitic process in the liver, we cannot prevent or materially affect the resulting cirrhosis unless the cases are seen early and recognized.

#### DISCUSSION

DR. M. HOWARD FUSSELL, Philadelphia: I saw a man with a mass as large as an infant's head apparently in the left lobe of the liver. Everybody thought it was certainly carcinoma. Administration of inunctions caused the disappearance of the tumor before five weeks.

DR. J. M. ANDERS, Philadelphia: Cases of syphiloma on the surface of the organ are, according to certain writers, rare. This does not accord with my own personal experience. With one or two exceptions the tumor has been attached to the left lobe of the liver. This is a point which should ever be borne in mind.

DR. THEODORE C. JANEWAY, New York: There is one point of diagnosis my father laid stress on, namely, the peritoneal friction rub due to the perihepatitis over the gummatous nodule which will be found if searched for.

DR. GEORGE DOCK, St. Louis: Years ago in discussing continued fever of obscure origin I reported a case of syphilis of the liver illustrating that feature. I recently saw another case in which I was able to help the patient by remembering my former experience. The patient was immediately put on large doses of iodid, the nocturnal pains stopped almost at once, the liver went down, but the tumor remained as a stony hard mass in the same region, showing about the same resistance to *x*-rays. In these cases the therapeutic test is advisable.

### Diabetes Insipidus

DR. JAMES B. HERRICK, Chicago: In a case of diabetes insipidus of four years' standing, in an adult male, because of certain cerebral symptoms and in order to investigate as to possible lesion of the hypophysis, lumbar puncture was made, less than 5 c.c. of clear fluid escaping slowly and under low pressure. A remarkable drop in the amount of urine followed and a rise in specific gravity. Before lumbar puncture the daily amount of urine had been from 7,000 to 11,000 c.c. and the specific gravity 1.001. For four weeks after the puncture the amount averaged 1,500 c.c. and the specific gravity 1.015. The features of especial interest in the case were the possible etiology in hypophyseal disease and the sudden change in the urine following lumbar puncture. The latter feature had a bearing on the question of the ability of the kidney in this disease to pass a concentrated urine, a point especially emphasized by Erik Meyer. This clinical experience seemed to show an ability of the kidney of diabetes insipidus to pass such urine, at least under certain conditions.

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### The Advantages and Disadvantages of the Intravenous, Intramuscular and Subcutaneous Injections of Antitoxin

DR. W. H. PARK, New York: The rapidity of absorption varies as follows: At the times stated below a given dose of antitoxin will give an amount of antitoxin in the blood as follows:

| | 6 Hours. | 12 Hours. | 24 Hours. | 48 Hours. |
|---|---|---|---|---|
| Intravenous ..... | 120 | 100 | 100 | 80 |
| Intramuscular .... | 6 | 24 | 40 | 45 |
| Subcutaneous ..... | 3 | 12 | 20 | 25 |

The effectiveness of antitoxin, quantitatively considered, is in proportion to the amount in the blood current. During the first twenty-four hours one part given intravenously is worth eight parts given subcutaneously and four intramuscularly. In practice, intramuscular injections often act as subcutaneous ones, probably because the serum escapes from the muscle. No accidents have followed over 100 intravenous injections. The difficulty of giving is the only objection. In severe cases of diphtheria and in all cases of tetanus the antitoxin should be given intravenously.

### Immunity Against Trypanosomes

DR. F. G. NOVY, Ann Arbor, Mich.: The measures which aim at the control of the trypanosomal diseases of man and animal may be directed against the insect carrier, or against the vertebrate carrier which constitutes the natural reservoir of the virus, or they may be directed against the causative organism either by the introduction of trypanocidal agents (chemotherapy), or by resort to methods of immunization. Of the four measures immunization by means of suitable vaccines, if practicable, would be of first importance even if an efficient chemotherapy were developed. In the various attempts at immunization made by other workers, the parasites as found in the blood of an infected animal are injected either living or dead into the animal to be immunized. The successful cultivation of trypanosomes raised the hope that pure cultures could be obtained which would be at once attenuated and immunizing. This hope has been fully realized in the case of *Trypanosoma lewisi*. Cultures of this organism when grown in the laboratory for three years or more become attenuated to such an extent that the injection of any amount of the living growth fails to produce an infection. The production of a living vaccine against a protozoal disease is thus realized for the first time. The availability of the method for the more strictly pathogenic trypanosomes remains to be established. The work of the past two years shows that *T. brucei* can become attenuated in similar manner.

# Association News

## PROCEEDINGS OF THE ATLANTIC CITY SESSION

(Continued from June 15, page 1913)

### Fifth Meeting—June 6, 1912

The House of Delegates met at 2:10 p. m. and was called to order by the President. The Secretary called the roll, and 101 delegates responded. The minutes of the previous meeting were read and approved.

#### Supplementary Report of the Committee on Credentials

Dr. D. Chester Brown, Connecticut, Chairman, presented a supplementary report from the Committee on Credentials, showing that 135 delegates had been seated. He then presented the following:

The finding of the Committee on Credentials of the House of Delegates of the A. M. A. with reference to the contested seat in the Illinois delegation:

A full hearing of all those present and desiring to speak was given by your committee, who beg to make the following report and to file with this report the stenographic minutes of the hearing.

Illinois is entitled to nine delegates in the House. Six delegates presented credentials and were duly seated. Two alternates presented the credentials of the delegates for whom they were elected alternates and on the back the credentials were duly endorsed by the delegate authorizing the alternate to act for him. Three other alternates present themselves to fill this vacant seat in the Illinois delegation with credentials that authorize them to act for their principals and in each case it is stated on the credential who that principal is. On consulting the roster of the House, it is found that each of the principals designated is already seated.

The ninth delegate has not appeared, neither has his alternate, the only alternate not otherwise disposed of.

The question raised by a portion of the Illinois delegation is as to a question of fact. The statement is made that individual alternates were not designated to act for individual delegates in the event of the absence of the delegate, but that any one of the nine alternates presenting would be entitled to the seat.

This is based on recollection of an action thought to have been taken by the House of Delegates of the Illinois State Association, but has no documentary evidence in its support.

Your committee therefore submit that no competent credential has been presented for the contested seat and therefore declare it vacant.

Your committee would call attention to the fact that no standing rules have been submitted to them for their guidance, and would therefore recommend that the House adopt the following as standing rules for guidance of the Committee on Credentials and that copies of these rules be printed and sent to each member of the Committee on Credentials at least one week preceding the meeting of the House.

*Rule 1.*—Credentials shall be of two parts. The first part shall be sent to the office of the Secretary of the American Medical Association by the secretary of the constituent association and shall be a list of delegates for that association, with an alternate designated for each delegate to act in his stead when so authorized by the principal.

*Rule 2.*—Each delegate shall be furnished with a credential by the secretary of the association by which he is elected on a prescribed form furnished by the Secretary of the A. M. A. which shall give the date and term for which he was elected and who was elected to act as alternate for him in case of his inability.

*Rule 3.*—A delegate, on presenting himself to the Committee on Credentials, may be seated even though he may not present part 2 of his credential, provided he is properly identified as the delegate who was elected by his association and whose name appears on the Secretary's record.

*Rule 4.*—No alternate may be seated unless his credentials meet the same requirements as designated for the delegate and he can show written evidence that he is empowered by his delegate to act for him.

D. C. BROWN, Chairman.
E. J. GOODWIN,
F. A. TUCKER,
E. A. VANDERVEER,
H. W. VAN ALLEN.

Dr. William L. Noble, Illinois, moved that the report be adopted, and that the recommendations be concurred in.

Motion seconded and carried.

#### Election of Officers

The election of officers being in order, Dr. A. B. Cooke, Nashville, Tenn., nominated for President, Dr. John A. Witherspoon, Nashville, Tenn.

The nomination of Dr. Witherspoon was seconded by Pennsylvania, New York, Montana, Massachusetts, Missouri, Virginia, Texas, Ohio, Wisconsin, Oregon, California, Utah, Indiana, New Mexico and Illinois, after which Dr. Edward Jackson, Colorado, moved that the nominations be closed and the Secretary cast a ballot for the House of Delegates.

Motion seconded and carried.

The secretary then cast the ballot of the House for Dr. Witherspoon and he was declared duly elected.

Other officers were likewise nominated and duly elected as follows:

First Vice-President, Dr. Philander A. Harris, Paterson, N. J.
Second Vice-President, Dr. John L. Heffron, Syracuse, N. Y.
Third Vice-President, Dr. H. M. McClanahan, Omaha.
Fourth Vice-President, Dr. Henry D. Fry, Washington, D. C.
Secretary, Dr. Alexander R. Craig, Chicago.
Treasurer, Dr. William Allen Pusey, Chicago.
Trustees, Dr. M. L. Harris, Chicago; Dr. C. A. Daugherty, South Bend, Ind.; Dr. W. T. Councilman, Boston.
Member of the Judicial Council, Dr. George W. Guthrie, Wilkes-Barre, Pa.
Member of Council on Health and Public Instruction, Dr. Walter B. Cannon, Boston.
Members of Council on Medical Education, Dr. James W. Holland, Philadelphia; Dr. W. D. Haggard, Nashville, Tenn.

#### Associate Members

The Secretary presented the list of applicants for associate membership endorsed by the sections and on motion of Dr. A. W. McAlester, Missouri, duly seconded and carried, the Secretary was instructed to cast the ballot of the House in each case in which the applicant is eligible for associate membership in the American Medical Association, i. e., when the applicant is not eligible to membership in his component state associations.

The President nominated as officers of the Section on Orthopedic Surgery, Dr. Newton M. Shaffer, New York, Chairman; Dr. John Ridlon, Chicago, Secretary.

On motion, duly seconded, these nominations were confirmed.

#### Report of Reference Committee on Sections and Section Work

Dr. Wesley T. Mulligan, New York, Chairman, presented the following report of the Reference Committee on Sections and Section Work:

Your committee has received a request from the Section on Pharmacology and Therapeutics asking that the House of Delegates instruct the Chairman of the Council on Health and Public Instruction to endeavor to secure a modification of our American patent laws, eliminating produce patents on chemicals used as medicine.

The committee recommends favorable action to the House of Delegates.

We have also received a communication from the Section on Surgery asking that the American Medical Association, through its component bodies, inaugurate a system of organized inspection and classification of all American civil hospitals. This was acted on by the House of Delegates at its meeting on Wednesday afternoon, and no further action is deemed necessary.

For the Committee,
WESLEY T. MULLIGAN, Chairman.

On motion, duly seconded, the report was adopted.

#### Report of Reference Committee on Hygiene and Public Health

Dr. Oscar Dowling, Louisiana, Chairman, presented the report of the Reference Committee on Hygiene and Public Health, as follows:

The Reference Committee on Hygiene and Public Health, on the matters referred to it, respectfully reports and recommends:

That the appointment of a committee to draft a standard law for the prevention of ophthalmia neonatorum be referred

to the Council on Health and Public Instruction with power to act.

That the resolution regarding Principles of Medical Ethics requires no further action on the part of the House.

That methods of procedure for the prevention and control of tuberculosis be approved and referred to the Council on Health and Public Instruction.

That action was taken last year on resolution regarding venereal disease.

That resolutions regarding a pure milk-supply be referred to the Council on Health and Public Instruction.

That the appointment of a committee on industrial hygiene be referred to the Council on Health and Public Instruction with a recommendation for early and favorable consideration.

Respectfully submitted,

OSCAR DOWLING, Chairman.
EDWARD JACKSON.
V. H. STICKNEY.
L. W. LITTIG.
JOHN CHAMPLIN.

On motion, duly seconded, the report was adopted.

### Report of Reference Committee on Legislation and Political Action

Dr. William A. Evans, Illinois, Chairman, presented the Report of the Reference Committee on Legislation and Political Action in the form of extracts from the minutes of the reference committee.

In regard to annual conferences, it was moved that it is the sense of this committee that the Chairman of the Council on Health and Public Instruction, the Chairman of the Council on Medical Education, and the Chairman of the Section on Preventive Medicine be requested to hold a conference with reference to the advisability of holding the joint conference on education and legislation at the annual session of the American Medical Association.

As to the remainder of the report from the last paragraph, bottom of page 78 of the handbook and to page 79, the recommendation of the committee is that they be stricken from the report as not within the province of the Council.

There was also referred to us the report of the Committee for Arranging for Public Meetings and Lectures in Atlantic City, and in view of the action of the House of Delegates in covering this point there is no reason why it should be considered further, and therefore the committee recommends that this report and all reference to it be stricken from the files.

On motion, duly seconded, the report of Council was adopted as amended by striking out the last paragraph.

Moved and seconded that the report of the Committee to Arrange for Public Meetings at Atlantic City be laid on the table. Carried.

Moved and seconded that the resolution urging the enactment of laws limiting traffic in opium and cocain be referred to the Standing Committee on National Health Organization. Carried.

### Report of Committee on National Department of Health

On motion, the report of the Committee on National Department of Health was adopted, together with a resolution that the President of the American Medical Association be empowered to reform the committee in such a way as to increase its efficiency, taking from or adding to its membership as he may see fit; that this committee perfect such an organization as is best suited for its work, and that the Board of Trustees be instructed to make the necessary appropriation of funds for its expenses.

W. A. EVANS, Chairman.

A motion was made to adopt the recommendations contained in the minutes of the Reference Committee. Seconded.

Dr. E. J. Goodwin, Missouri, moved to amend by substituting in the last recommendation contained in the minutes regarding an appropriation for defraying the expenses of the Committee on National Department of Health the word "may" for "be instructed to" after the words "Board of Trustees" and before "make the necessary appropriation." Motion seconded and carried.

On separate motions duly seconded and carried, the other recommendations contained in the minutes of the reference committee were adopted.

Dr. William A. Evans, Illinois: Inasmuch as we have acted on the report of the Council on Health and Public Instruction on two separate days, I now move the adoption of the Report of the Council on Health and Public Instruction as amended. Motion duly seconded and carried.

### Report of Reference Committee on Reports of Officers

Dr. Hubert Work, Colorado, Chairman, presented the report of the Reference Committee on Reports of Officers, as follows:

Your Reference Comittee on Reports of Officers takes the greatest pleasure in endorsing the resolution referred to it yesterday based on the suggestion made by President Jacobi, and recommends its adoption as follows:

WHEREAS, The universal experience of thousands of years has established the knowledge that deluges and freshets have changed the surface of the globe, and exterminated people or impoverished them; and

WHEREAS, In many cases such calamities could be referred to the disappearance of the forests; and

WHEREAS, The recent freshets and floods of the Mississippi have resulted in the devastation of thousands of square miles, the deaths of hundreds of people, the starvation and invalidism of thousands, and the impoverishment of hundreds of thousands of people for the present and for generations to come; be it

*Resolved*, That the American Medical Association urge the Government of the United States and the individual states to take immediate steps in the direction of extensive reforestration of the country and thereby to protect, if only in the future, the country against the return of similar calamities.

For the committee,

HUBERT WORK, Chairman.

On motion, duly seconded, the report was adopted.

### Report of Reference Committee on Miscellaneous Business

Dr. W. E. Anderson, Virginia, Chairman, presented the report of the Reference Committee on Miscellaneous Business, as follows:

1. Reporting on resolution offered by Dr. H. D. Arnold of Massachusetts, i. e., that the President appoint a Committee on Anesthesia to consist of five members, for the purpose of continuing investigations on anesthesia, and that the Board of Trustees be requested to appropriate money for this purpose.

The Reference Committee recommends the approval and adoption of resolution as offered.

2. Referring to the communication from the Section on Preventive Medicine and Public Health presented to the house by Dr. Dowling yesterday, the Reference Committee recommends the approval of the communication and suggests that it be referred to the Council on Health and Public Instruction with a recommendation for early and favorable action.

For the committee,

W. E. ANDERSON, Chairman.

On motions, duly seconded, each section was adopted.

### Report of Committee on Reapportionment

The Secretary presented the following report of the Committee on Reapportionment:

Your Committee on Reapportionment recommends to the House that the apportionment for the next three years shall be on the basis of one delegate for every 700 and fraction thereof of membership of the constituent state associations.

The committee appends a table recording the present apportionment, the number of members of the different state associations reported by the secretaries of these state associations as of April 1, 1912, and an apportionment made on the basis of 675 and fraction thereof and of 700 and fraction thereof. The apportionment based on a representation of one delegate for every 700 and fraction thereof members distributes 149 voting delegates of the House of Delegates.

[The table is on the opposite page.]

Respectfully submitted,

EDWIN WALKER,
J. L. CROOK.
J. Z. SHEDD.
J. B. MURPHY.
ALEX. R. CRAIG.

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| | Apportionment. Present. | State Members April 1, 1912. | One delegate to every 675 and fraction members. Delegates. | Gain. | Loss. | One delegate to every 700 and fraction members. Delegates. | Gain. | Loss. |
|---|---|---|---|---|---|---|---|---|
| Alabama | 3 | 1,693 | 3 | .... | .... | 3 | .... | .... |
| Arizona | 1 | 128 | 1 | .... | .... | 1 | .... | .... |
| Arkansas | 2 | 969 | 2 | .... | .... | 2 | .... | .... |
| California | 3 | 2,030 | 4 | 1 | .... | 3 | .... | .... |
| Colorado | 2 | 822 | 2 | .... | .... | 2 | .... | .... |
| Connecticut | 2 | 840 | 2 | .... | .... | 2 | .... | .... |
| Delaware | 1 | 107 | 1 | .... | .... | 1 | .... | .... |
| Dist. of Columbia | 1 | 580 | 1 | .... | .... | 1 | .... | .... |
| Florida | 1 | 339 | 1 | .... | .... | 1 | .... | .... |
| Georgia | 2 | 1,408 | 3 | 1 | .... | 3 | 1 | .... |
| Idaho | 1 | 104 | 1 | .... | .... | 1 | .... | .... |
| Illinois | 9 | 5,609 | 9 | .... | .... | 9 | .... | .... |
| Indiana | 4 | 2,264 | 4 | .... | .... | 4 | .... | .... |
| Iowa | 3 | 1,978 | 4 | 1 | .... | 4 | 1 | .... |
| Kansas | 2 | 1,150 | 2 | .... | .... | 2 | .... | .... |
| Kentucky | 4 | 2,437 | 4 | .... | .... | 4 | .... | .... |
| Louisiana | 2 | 1,002 | 2 | .... | .... | 2 | .... | .... |
| Maine | 1 | 637 | 1 | .... | .... | 1 | .... | .... |
| Maryland | 2 | 1,106 | 2 | .... | .... | 2 | .... | .... |
| Massachusetts | 6 | 3,342 | 5 | .... | 1 | 5 | .... | 1 |
| Michigan | 3 | 2,239 | 4 | 1 | .... | 4 | 1 | .... |
| Minnesota | 2 | 1,364 | 2 | .... | .... | 2 | .... | .... |
| Mississippi | 2 | 958 | 2 | .... | .... | 2 | .... | .... |
| Missouri | 5 | 3,047 | 5 | .... | .... | 5 | .... | .... |
| Montana | 1 | 233 | 1 | .... | .... | 1 | .... | .... |
| Nebraska | 2 | 885 | 2 | .... | .... | 2 | .... | .... |
| Nevada | 1 | 65 | 1 | .... | .... | 1 | .... | .... |
| New Hampshire | 1 | 490 | 1 | .... | .... | 1 | .... | .... |
| New Jersey | 3 | 1,508 | 3 | .... | .... | 3 | .... | .... |
| New Mexico | 1 | 164 | 1 | .... | .... | 1 | .... | .... |
| New York | 11 | 7,066 | 11 | .... | .... | 11 | .... | .... |
| North Carolina | 2 | 1,126 | 2 | .... | .... | 2 | .... | .... |
| North Dakota | 1 | 388 | 1 | .... | .... | 1 | .... | .... |
| Ohio | 7 | 3,580 | 6 | .... | 1 | 6 | .... | 1 |
| Oklahoma | 2 | 1,089 | 2 | .... | .... | 2 | .... | .... |
| Oregon | 1 | 419 | 1 | .... | .... | 1 | .... | .... |
| Pennsylvania | 9 | 5,728 | 9 | .... | .... | 9 | .... | .... |
| Rhode Island | 1 | 370 | 1 | .... | .... | 1 | .... | .... |
| South Carolina | 2 | 688 | 2 | .... | .... | 1 | .... | 1 |
| South Dakota | 1 | 272 | 1 | .... | .... | 1 | .... | .... |
| Tennessee | 3 | 1,373 | 3 | .... | .... | 2 | .... | 1 |
| Texas | 5 | 3,081 | 5 | .... | .... | 5 | .... | .... |
| Utah | 1 | 227 | 1 | .... | .... | 1 | .... | .... |
| Vermont | 1 | 336 | 1 | .... | .... | 1 | .... | .... |
| Virginia | 3 | 1,630 | 3 | .... | .... | 3 | .... | .... |
| Washington | 2 | 817 | 2 | .... | .... | 2 | .... | .... |
| West Virginia | 2 | 561 | 1 | .... | 1 | 1 | .... | 1 |
| Wisconsin | 3 | 1,651 | 3 | .... | .... | 3 | .... | .... |
| Wyoming | 1 | 118 | 1 | .... | .... | 1 | .... | .... |
| Canal Zone | 1 | 80 | 1 | .... | .... | 1 | .... | .... |
| Hawaii | 1 | 79 | 1 | .... | .... | 1 | .... | .... |
| Philippine Islands | 1 | 108 | 1 | .... | .... | 1 | .... | .... |
| Sections and Government Services | .... | .... | 17 | .... | .... | 17 | .... | .... |
| Total | .... | .... | 152 | .... | .... | 149 | .... | .... |

On motion of Dr. Thomas D. Davis, Pennsylvania, the apportionment recommended was adopted.

### Report of Committee on Awards for Scientific Exhibit

Dr. H. A. Royster presented the report of the Committee on Awards for Scientific Exhibit, as follows:

Your committee begs leave to submit the following report:

1. In view of the very superior excellence of the two research exhibits, one by Morton H. Fisher on experimental nephritis and another on experimental endocarditis by E. C. Rosenow, it is the opinion of a majority of your committee that a gold medal be awarded to each of these gentlemen.

2. We recommend the award of a gold medal to E. Libman for the best exhibit of general nature, a series of hearts showing bacterial endocarditis.

3. We recommend the award of certificates of honor to the following:

A. W. D. Gatch, Indiana University School of Medicine, Indianapolis. Experimental intestinal anastomosis.

B. J. Shelton Horsley, Richmond, Va. Experimental suturing of blood-vessels.

C. The Lying-In Hospital, New York. Exhibits showing pathologic conditions of the prenatal and lying-in state.

D. Miscellaneous Exhibit of the Army Medical Museum.

E. Department of Sanitation of the Isthmian Canal Commission. Malaria and amebic dysentery.

F. John A. Sampson. Photograpic enlargements showing carcinoma of the uterus and blood-supply of uterine fibroid.

G. Harvard University Medical School. Exhibits showing by photographs and photomicrographs
Trypanosomes as parasites,
Phagedenic ulcer by S. B. Walbach,
Photomicrographs showing pathologic histology of heart, kidney and blood-vessels, by F. B. Mallory.

H. Mayo Clinic. Series of photomicrographs showing:
Diverticulitis of the sigmoid.
Pathology of the prostate.
Gastric contents.
*X*-ray series showing:
Lane splints and transplantation of bone.
Esophageal lesions.
Gastro-intestinal conditions.
Stereoscopic plates of tuberculosis.
Intrathoracic thyroid.

E. J. McKNIGHT.
HUGH T. PATRICK.
H. A. ROYSTER.

On motion of Dr. Joseph D. Martin, Louisiana, seconded by Dr. D. Chester Brown, Connecticut, the report was adopted.

### Report of Committee on Transportation and Place of Session

Dr. J. R. Pennington, Chairman, presented the report of the Committee on Transportation and Place of Session.

Dr. Curran Pope and Dr. Arthur T. McCormack, Kentucky, spoke in favor of Louisville for the place of next meeting; Dr. George D. Head, Dr. R. C. Dugan, Dr. Donald Campbell and Dr. Charles Lyman Greene spoke in favor of Minneapolis, after which Louisville and Minneapolis were placed in nomination for the place of the next annual meeting. A ballot was taken which resulted in the selection of Minneapolis. On motion of Dr. Curran Pope, the vote in favor of Minneapolis was made unanimous.

### Dr. Jacobi's Address

Dr. Jacobi then addressed the House expressing his appreciation of the work of the House.

Dr. Arthur T. McCormack, Kentucky, offered the following resolution:

*Resolved*, That the gratitude of the House of Delegates be extended to Dr. Conaway and his associates in the profession of Atlantic City and to the governor and people of New Jersey for their cordial and splendid treatment of the members and guests of the Association.

Motion seconded and carried.

There being no further business, on motion of Dr. Thomas D. Davis, Pennsylvania, the House of Delegates then adjourned, *sine die*.

## *Members of House of Delegates in Attendance*

[The figures indicate the number of delegates to which the state is entitled.]

**ALABAMA—3**
Seale Harris.....Mobile
Lewis C. Morris..Birmingham
E. D. Bondurant.....Mobile

**ARIZONA—1**

**ARKANSAS—2**
G. A. Warren.....Black Rock
Morgan Smith....Little Rock

**CALIFORNIA—3**
O. D. Hamlin.....Oakland
George A. Hare.....Fresno
George H. Kress..Los Angeles

**COLORADO—2**
Hubert Work.....Pueblo
Edward Jackson.....Denver

**CONNECTICUT—2**
D. Chester Brown...Danbury
E. J. McKnight.....Hartford

**DELAWARE—1**

**DISTRICT OF COLUMBIA—1**
G. Wythe Cook...Washington

**FLORIDA—1**
Jos. Y. Porter...Jacksonville

**GEORGIA—2**
Edgar G. Ballenger...Atlanta
T. J. Charlton.....Savannah

**HAWAII—1**

**IDAHO—1**

**ILLINOIS—9**
Hugh T. Patrick.....Chicago
Albert L. Brittin.....Athens
John A. Robison.....Chicago
W. L. Noble.....Chicago
A. C. Cotton.....Chicago
George S. Rainey.....Salem
Rufus J. Coulter.....Mattoon
Clifford U. Collins.....Peoria

**INDIANA**
Miles F. Porter....Ft. Wayne
F. A. Tucker.....Noblesville
J. Rilus Eastman..Indianapolis
Edwin Walker.....Evansville

**IOWA—3**
Max Witte.....Clarinda
L. W. Littig.....Davenport
M. N. Voldeng.....Cherokee

**ISTHMIAN CANAL ZONE—1**
William C. Gorgas.....Ancon

**KANSAS—2**

KENTUCKY—4
Curran Pope.....Louisville
A. T. McCormack Bowling Gr'n.
J. W. Ellis.....Masonville
J. N. McCormack Bowling Gr'n.

LOUISIANA—2
Oscar Dowling....Shreveport
Jos. D. Martin..New Orleans

MAINE—1
E. H. Bennett.....Lubec

MARYLAND—2
G. Lane Taneyhill...Baltimore
R. B. Warfield.....Baltimore

MASSACHUSETTS—6
F. H. Thompson...Fitchburg
F. G. Wheatley..N. Abington
Hugh Cabot.....Boston
Horace D. Arnold.....Boston
H. G. Stetson.....Greenfield
H. W. Van Allen..Springfield

MICHIGAN—3
F. W. Robbins.....Detroit
R. R. Smith....Grand Rapids
Arthur D. Holmes....Detroit

MINNESOTA—2
George D. Head..Minneapolis
R. C. Dugan.....Eyota

MISSISSIPPI—2
J. W. Young.....Grenada

MISSOURI—5
E. J. Goodwin.....St. Louis
R. M. Funkhouser..St. Louis
A. McAlester..Kansas City
C. R. Woodson....St. Joseph
H. L. Reid.....Charleston

MONTANA—1
Donald Campbell.....Butte

NEBRASKA—2
A. R. Mitchell.....Lincoln
E. A. Steenburg.....Aurora

NEVADA—1
M. A. Robison.....Reno

NEW HAMPSHIRE—1
John Z. Shedd..North Conway

NEW JERSEY—3
Edward Guion..Atlantic City
C. R. P. Fisher..Bound Brook
Alexander McAllister..Camden

NEW MEXICO—1.
W. R. Tipton..East Las Vegas

NEW YORK—11
A. T. Bristow.....Brooklyn
Edward E. Cornwall..Brooklyn
Leo H. Newman.....Albany
James W. Fleming..Brooklyn
Wesley T. Mulligan..Rochester
Edgar A. Vander Veer..Albany
Wendell C. Phillips..New York
Dwight Murray.....Syracuse
James P. Warbasse..Brooklyn
William D. Johnson..Batavia
Grant C. Madiel..Ogdensburg

NORTH CAROLINA—2
J. F. Highsmith..Fayetteville

NORTH DAKOTA—1
Victor H. Stickney..Dickinson

OHIO—7
J. E. Tuckerman....Cleveland
E. J. March.....Canton
J. H. J. Upham....Columbus
C. L. Bonifield....Cincinnati
W. J. Means.....Columbus
Auguste Rhu.....Marion
H. C. Haning.....Dayton

OKLAHOMA—2
W. F. Wright.....Tulsa
E. S. Lain....Oklahoma City

OREGON—1
K. A. J. MacKenzie..Portland

PENNSYLVANIA—9
Thomas D. Davis..Pittsburgh
T. S. Arbuthnot....Pittsburgh
F. W. Frankhauser...Reading
W. T. Hamilton..Philadelphia
G. W. Guthrie..Wilkes-Barre
T. B. Appel.....Lancaster
John R. Lowman..Johnstown
M. H. Fussell...Philadelphia
Luther B. Kline....Catawissa

PHILIPPINE ISLANDS—1

RHODE ISLAND—1
John Champlin.....Westerly

SOUTH CAROLINA—2
John L. Dawson...Charleston
E. A. Hines.....Seneca

SOUTH DAKOTA—1
T. B. Smiley.....Mt. Vernon

TENNESSEE—3
Jere L. Crook.....Jackson
A. B. Cooke.....Nashville
S. M. Miller.....Knoxville

TEXAS—5
Joe Becton.....Greenville
J. H. McCracken..Min. Wells
Holman Taylor....Fort Worth
W. B. Russ.....San Antonio

UTAH—1
Sol G. Kahn..Salt Lake City

VERMONT—1

VIRGINIA—3
C. M. Miller.....Richmond
W. E. Anderson....Farmville
John S. Davis.....University

WASHINGTON—2
J. E. Else.....Pullman

WEST VIRGINIA—2
F. L. Hupp.....Wheeling
P. A. Haley.....Charleston

WISCONSIN—3
Charles S Sheldon....Madison
A. H. Levings.....Milwaukee
John F. Pember...Janesville

WYOMING—1

**Delegates From the Sections**

PRACTICE OF MEDICINE
J. A. Capps.....Chicago

SURGERY
H. A. Royster..Raleigh, N. C.

OBSTETRICS AND GYNECOLOGY
H. G. Wetherill.....Denver

OPHTHALMOLOGY
Hiram Woods .....Baltimore

LARYNGOLOGY, OTOLOGY AND RHINOLOGY
W. S. Bryant..New York City

DISEASES OF CHILDREN
.....

PHARMACOLOGY AND THERAPEUTICS
Reid Hunt..Washington, D. C.

PATHOLOGY AND PHYSIOLOGY
.....

STOMATOLOGY
G. V. I. Brown.....Milwaukee

NERVOUS AND MENTAL DISEASES
A. E. Sterne.....Indianapolis

DERMATOLOGY
Grover W. Wende.....Buffalo

PREVENTIVE MEDICINE AND PUBLIC HEALTH
W. A. Evans.....Chicago

GENITO-URINARY DISEASES
Richard F. O'Neil.....Boston

HOSPITALS
Frederick A. Washburn..Boston

**Delegates From Government Services**

Jefferson R. Kean..U. S. Army
Edward R. Stitt....U. S. Navy
John W. Kerr.....
...U. S. P. H. and M.-H. S.

## *Reference Committees of the House of Delegates*

SECTIONS AND SECTION WORK
Wesley T. Mulligan..New York
K. A. J. MacKenzie...Oregon
Hugh Cabot....Massachusetts
Thomas D. Davis..Pennsylvania
A. H. Levings.....Wisconsin

RULES AND ORDER OF BUSINESS
W. R. Tipton.....New Mexico
A. R. Mitchell.....Nebraska
G. A. Warren.....Arkansas
C. R. P. Fisher.....New Jersey
G. L. Taneyhill.....Maryland

MEDICAL EDUCATION
J. H. J. Upham.....Ohio
H. D. Arnold...Massachusetts
Reid Hunt.....D. C.
G. W. Guthrie...Pennsylvania
A. T. Bristow.....New York

HYGIENE AND PUBLIC HEALTH
Oscar Dowling .....Louisiana
John Champlin...Rhode Island
Edward Jackson.....Colorado
V. H. Stickney..North Dakota
Lawrence Littig.....Iowa

LEGISLATION AND POLITICAL ACTION
W. A. Evans.....Illinois
Morgan Smith .....Arkansas
A. B. Cooke.....Tennessee
Jefferson R. Kean..U. S. Army
W. C. Gorgas.....Canal Zone

AMENDMENTS TO CONSTITUTION AND BY-LAWS
A. T. McCormack....Kentucky
William B. Russ.....Texas
Seale Harris .....Alabama
S. G. Kahn.....Utah
William L. Noble.....Illinois

REPORT OF OFFICERS
Hubert Work .....Colorado
J. W. Young.....Mississippi
Donald Campbell ...Montana
W. W. Richmond....Kentucky
E. A. Hines...South Carolina

CREDENTIALS
D. Chester Brown..Connecticut
E. A. Vander Veer..New York
H. W. Van Allen Massachusetts
E. J. Goodwin.....Missouri
J. W. Fleming.....New York

MISCELLANEOUS BUSINESS
W. E. Anderson.....Virginia
J. F. Highsmith North Carolina
R. R. Smith.....Michigan
P. A. Haley.....West Virginia
W. A. Jones.....Minnesota

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## *The Sections at Atlantic City*

The total registration at the Atlantic City Session was 3,598, an increase of 325 over the number of registrations there in 1909.

Below are given two summaries, one by Sections, and one by States.

REGISTRATION BY SECTIONS

| | |
|---|---|
| Practice of Medicine | 979 |
| Surgery | 907 |
| Obstetrics, Gynecology and Abdominal Surgery | 258 |
| Ophthalmology | 335 |
| Laryngology, Otology and Rhinology | 266 |
| Diseases of Children | 151 |
| Pharmacology and Therapeutics | 59 |
| Pathology and Physiology | 109 |
| Stomatology | 34 |
| Nervous and Mental Diseases | 143 |
| Dermatology | 67 |
| Preventive Medicine and Public Health | 142 |
| Genito-Urinary Diseases | 95 |
| Hospitals | 25 |
| Registrations without specifying any one Section | 88 |

REGISTRATION BY STATES

| | | | |
|---|---|---|---|
| Alabama | 24 | Nevada | 3 |
| Arizona | 3 | New Hampshire | 13 |
| Arkansas | 15 | New Jersey | 301 |
| California | 41 | New Mexico | 3 |
| Colorado | 26 | New York | 567 |
| Connecticut | 75 | North Carolina | 31 |
| Delaware | 17 | North Dakota | 2 |
| District of Columbia | 73 | Ohio | 201 |
| Florida | 7 | Oklahoma | 7 |
| Georgia | 24 | Oregon | 5 |
| Idaho | 1 | Pennsylvania | 608 |
| Illinois | 153 | Rhode Island | 34 |
| Indiana | 85 | South Carolina | 19 |
| Iowa | 45 | South Dakota | 8 |
| Kansas | 5 | Tennessee | 39 |
| Kentucky | 33 | Texas | 26 |
| Louisiana | 22 | Utah | 6 |
| Maine | 10 | Vermont | 9 |
| Maryland | 125 | Virginia | 59 |
| Massachusetts | 155 | Washington | 2 |
| Michigan | 75 | West Virginia | 1 |
| Minnesota | 52 | Wisconsin | 51 |
| Mississippi | 3 | Wyoming | 1 |
| Missouri | 70 | Philippine Islands | 1 |
| Montana | 10 | Nicaragua | 1 |
| Nebraska | 18 | Canal Zone | 3 |

The Atlantic City session completes the first ten years in which the present system of registration by sections has been in force. A summary of the attendance at the sections during this decade may be of interest. The total registration for these ten years is 34,563, and the average attendance is 3,456. The registration in the various sections and the yearly average in each is as follows:

| Section | Total | Average |
|---|---|---|
| Practice of Medicine | 8,767 | 877 |
| Surgery | 10,146 | 1,015 |
| Obstetrics, Gynecology and Abdominal Surgery | 2,782 | 278 |
| Ophthalmology | 2,555 | 256 |
| Laryngology, Otology and Rhinology | 1,436 | 144 |
| Diseases of Children | 1,321 | 132 |
| Pharmacology and Therapeutics | 492 | 49 |
| Pathology and Physiology | 649 | 65 |
| Stomatology | 432 | 43 |
| Nervous and Mental Diseases | 1,139 | 114 |
| Dermatology | 705 | 71 |
| Preventive Medicine and Public Health | 913 | 91 |
| Genito-Urinary Diseases | 113 | .. |
| Hospitals | 25 | .. |

The Section on Genito-Urinary Diseases, established two years ago, had a registration of 18 in 1911, and 95 in 1912.

The Section on Hospitals, established last year, had a registration of 25 this year.

A Section on Orthopedic Surgery was established this year and will hold its first meeting next year.

The difference between the sum of the totals of those registered in the Sections for the past ten years and the total registration, 34,563, is accounted for by the fact that each year a number fail to specify any one Section, that is, they either do not designate any Section, or mark more than one on their registration card.

Registrations at the various sessions in the last ten years were as follows:

| | |
|---|---|
| 1903 New Orleans, La. | 2,006 |
| 1904 Atlantic City, N. J. | 2,850 |
| 1905 Portland, Ore. | 1,678 |
| 1906 Boston, Mass. | 4,752 |
| 1907 Atlantic City, N. J. | 5,713 |
| 1908 Chicago, Ill. | 6,446 |
| 1909 Atlantic City, N. J. | 3,273 |
| 1910 St. Louis, Mo. | 4,084 |
| 1911 Los Angeles, Cal. | 2,153 |
| 1912 Atlantic City, N. J. | 3,598 |
| Total attendance, 1903-1912, inclusive, | 34,563 |

During the past ten years the average registration of 3,456 has been surpassed at half of the meetings, viz.: the Boston session in 1906; the Chicago session in 1908, and the St. Louis session in 1910 and the Atlantic City sessions of 1907 and 1912. The registration at Chicago, 6,446 still stands as the high water mark for attendance.

### Notice on Section Transactions

Those who desire copies of the 1912 Transactions of any of the sections, but whose names are not on the permanent subscription list, should order at once, as printing has already commenced. Only enough are printed to supply what is considered the probable demand, and each year some persons order too late to be supplied. Each volume is a cloth-bound book containing the articles and discussions in that particular section. The price, when ordered in advance, is $1.00 a volume, payable at time of delivery.

It is to be remembered that one may give a permanent order for Transactions; and those specified are sent, from year to year, until the order is cancelled. Address orders to the American Medical Association, 535 Dearborn Avenue, Chicago.

### Minutes of Sections

The minutes of the proceedings of the various sections which held meetings at the Sixty-Third Annual Session, held at Atlantic City, June 4-7, 1912, are given below—except those of the Section on Stomatology, which had not been received when these pages went to press.

## SECTION ON PRACTICE OF MEDICINE

### TUESDAY, JUNE 4—AFTERNOON

Dr. Wilder Tileston, of New Haven, Conn., called the meeting to order.

Dr. Thomas D. Coleman, Augusta, Ga., read a paper on "Arteriosclerosis." Discussed by Drs. L. F. Bishop, New York; G. W. McCaskey, Fort Wayne, Ind.; Henry O. Marcy, Boston; James M. Anders, Philadelphia; DeLancey Rochester, Buffalo; M. A. Cohn, Brooklyn, N. Y.; Marvin L. Graves, Galveston, Tex.; Tom A. Williams, Washington, D. C., and Thomas D. Coleman, Augusta, Ga.

Drs. Ray Lyman Wilbur and Thomas Addis, San Francisco, read a paper on "Urobilin: Its Clinical Significance."

Dr. Walter L. Bierring, Des Moines, Iowa, read a paper on "Chloroma: A Clinical Study of Two Cases." Discussed by Drs. Alfred Stengel, Philadelphia; E. Libman, New York; Wilder Tileston, New Haven, Conn., and Walter L. Bierring, Des Moines, Iowa.

Drs. Alfred Stengel and Henry K. Pancoast, Philadelphia, read a paper on "Treatment of Leukemia and Pseudoleukemia with X-Rays." Discussed by Drs. James Tyson, Philadelphia; Walter L. Bierring, Des Moines, Ia.; Carleton, (?), New York; Elliott P. Joslin, Boston; A. J. Quimby, New York; Alfred Stengel, Philadelphia, and Henry K. Pancoast, Philadelphia.

Drs. J. A. Capps and J. L. Miller, Chicago, read a paper on "Clinical Observations on an Epidemic of Sore Throat Due to Streptococcus."

Dr. David J. Davis, Chicago, read a paper on "Bacteriologic Study of Streptococci in Milk in Relation to Epidemic Sore Throat." Discussed by Drs. Robert Bruce Preble, Chicago; Louis P. Hamburger, Baltimore; Howard Anders, Philadelphia; J. N. Hall, Denver; E. C. Rosenow, Chicago; W. W. Tompkins, Charlton, W. Va.; Wilder Tileston, New Haven, Conn.; J. A. Capps, Chicago; J. L. Miller, Chicago, and David J. Davis, Chicago.

Drs. C. L. Cummer and Richard Dexter, Cleveland, read a paper on "Relation of Aortitis to Syphilis, and the Importance of Its Recognition." Discussed by Drs. DeLancey Rochester, Buffalo; N. B. Potter, New York; Kennon Dunham, Cincinnati; L. F. Bishop, New York; Arthur D. Dunn, Omaha, Neb.; Walter L. Bierring, Des Moines, Iowa, and C. L. Cummer, Cleveland.

### WEDNESDAY, JUNE 5—MORNING

The following were appointed on the Nominating Committee: Drs. James S. McLester, Birmingham, Ala.; Ray Lyman Wilbur, San Francisco, and Elliott P. Joslin, Boston.

Dr. Elliott P. Joslin, Boston, read a paper on "Personal Experience with Diabetes Mellitus Patients Living Ten or More Years." Discussed by Drs. Theodore C. Janeway, New York; J. A. Lichty, Pittsburgh; G. W. McCaskey, Fort Wayne, Ind.; Joseph L. Miller, Chicago; Louis J. Heyn, Cincinnati, and Elliott P. Joslin, Boston.

Drs. L. F. Barker and W. L. Estes, Jr., South Bethlehem, Pa., read a paper on "Family Hematoporphyrinuria and Its Association with Chronic Gastroduodenal Dilatation and Thyreopathy."

Dr. Theodore C. Janeway, New York, read a paper on "An Analysis of 500 Cases Showing High Blood-Pressure." Discussed by Drs. L. F. Barker, Baltimore; L. F. Bishop, New York; Edward E. Cornwall, Brooklyn, N. Y.; Howard Fussell, Philadelphia; N. B. Potter, New York, and Theodore C. Janeway, New York.

Dr. E. C. Rosenow, Chicago, read a paper on "Immunization in Pneumonia and Other Pneumococcus Infections." Discussed by Drs. B. W. Warren, Black Rock, Ark.; J. Solis Cohen, Philadelphia; DeLancey Rochester, Buffalo; J. A. Lichty, Pittsburgh, and E. C. Rosenow, Chicago.

Dr. Elsworth Smith, St. Louis, read a paper on "Pleural Vomicæ with a Report of Fourteen Cases." Discussed by Drs. Theodore C. Janeway, New York; Samuel Robinson, Boston; A. A. Gillette, Rome, N. Y., and Elsworth Smith, St. Louis.

Dr. Mary E. Lapham, Highlands, N. C., read a paper on "Treatment of Pulmonary Tuberculosis by Compression of the Lung." Discussed by Drs. Samuel Robinson, Boston; S. A. Knopf, New York; C. L. Minor, Asheville, N. C.; F. M. Pottenger, Monrovia, Cal., and Mary E. Lapham, Highlands, N. C.

Drs. Homer F. Swift and Arthur W. Ellis, New York, read a paper on "The Intensive Treatment of Syphilis." Discussed by Drs. Warren Coleman, New York; Gedide A. Friedman, New York, and Theodore C. Janeway, New York.

### WEDNESDAY, JUNE 5—AFTERNOON

Dr. Richard C. Cabot, Boston, read a paper on "Diagnostic Pitfalls." Discussed by Dr. Charles G. Stockton, Buffalo.

Dr. Charles Lyman Greene, St. Paul, Minn., delivered the oration in medicine on "Prognosis in Heart Disease as Affected by Certain Medical Traditions."

Dr. Warren Coleman, New York, read a paper on "Five Years' Experience with the High-Calory Diet in Typhoid." Discussed by Drs. Haven Emerson, New York; J. Solis Cohen, Philadelphia; Howard Fussell, Philadelphia; J. I. Johnson, Pittsburgh; Walter L. Bierring, Des Moines, Iowa; B. W. Warren, Black Rock, Ark.; M. L. Graves, Galveston, Tex., and Warren Coleman, New York.

Dr. Philip Marvel, Atlantic City, N. J., read a paper on "A Plea for the More Frequent Scientific Employment of Physical Therapeutics." Discussed by Drs. W. G. Schauffler, Lakewood, N. J.; J. Solis Cohen, Philadelphia; A. Bern Hirsh, Philadelphia; Hobart A. Hare, Philadelphia; J. M. Swan, Rochester, N. Y., and P. Marvel, Atlantic City.

Dr. Allen A. Jones, Buffalo, read a paper on "Hunger Pain." Discussed by Drs. M. A. Cohn, Brooklyn, N. Y.; Walter L. Bierring, Des Moines, Iowa; Wilder Tileston, New Haven, Conn.; Charles G. Stockton, Buffalo, and Allen A. Jones, Buffalo.

THURSDAY, JUNE 6—MORNING

The following officers were elected: Chairman, Dr. W. Jarvis Barlow, Los Angeles, Cal.; Vice-Chairman, Dr. Thomas McCrae, Philadelphia; Secretary, Dr. Roger S. Morris, St. Louis; Delegate, Dr. Joseph A. Capps, Chicago, and Alternate, Dr. Alexander Lambert, New York.

Drs. Jesse S. Myer and R. D. Carman, St. Louis, read a paper on "Cardiospasm with Sacculation of the Esophagus, with Special Reference to Persistence of the Sac." Discussed by Drs. H. S. Plummer, Rochester, Minn.; Haven Emerson, New York; G. W. McCaskey, Fort Wayne, Ind.; Charles J. White, Boston; Anthony Bassler, New York, and Jesse S. Myer, St. Louis.

Dr. G. E. Pfahler, Philadelphia, read a paper on "Constrictions of the Bowel: Their Demonstration and Clinical Significance." Discussed by Drs. Judson Daland, Philadelphia; Anthony Bassler, New York; Charles J. White, Boston, and G. E. Pfahler, Philadelphia.

Dr. Lewis Gregory Cole of New York, read a paper on "The Value of Serial Radiography in the Diagnosis of Gastroduodenal Lesions." Discussed by Drs. G. E. Pfahler, Philadelphia, and Lewis G. Cole, New York.

Dr. J. W. Weinstein, New York, read a paper on "A New Method of Treatment of Ulcer of Stomach." Discussed by Drs. A. A. Gillette, Rome, N. Y.; Walter W. Hamburger, Chicago; Julius Friedenwald, Baltimore; Albert E. Roussel, Philadelphia; Louis M. Allyn, Mystic, Conn.; A. W. Calloway, Asheville, N. C.; M. Milton Portis, Chicago; Anthony Bassler, New York; Wilder Tileston, New Haven, Conn., and J. W. Weinstein, New York.

Dr. Walter W. Hamburger, Chicago, read a paper on "Comparative Studies in Cancer and Normal Ferments." Discussed by Drs. J. W. Weinstein, New York; Gedide A. Friedman, New York, and Walter W. Hamburger, Chicago.

Dr. H. Z. Giffin, Rochester, Minn., read a paper on "Diverticulitis of the Large Bowel; Clinical Review of Twenty-Seven Cases." Discussed by Drs. Alfred Stengel, Philadelphia, and H. Z. Giffin, Rochester, Minn.

Dr. Theodore B. Barringer, New York, read a paper on "Prognosis in Cases of Albuminuria With or Without Casts."

THURSDAY, JUNE 6—AFTERNOON

In the afternoon the Section held a joint meeting with the Section on Surgery. For the papers read see the minutes of that Section.

## SECTION ON SURGERY

TUESDAY, JUNE 4—AFTERNOON

The Chairman, Dr. T. W. Huntington, San Francisco, called the meeting to order at 2 p. m.

Dr. L. L. McArthur, Chicago, delivered the oration on surgery, entitled "An Aseptic Route to the Pituitary Body Through the Orbital Vault."

Dr. T. W. Huntington, San Francisco, read the Chairman's address, entitled "The Hospital Problem."

Dr. Parker Syms, New York, moved that the recommendations made in the Chairman's address be presented to the House of Delegates by the Section delegate for consideration. Seconded and carried.

Dr. G. W. Crile, Cleveland, read a paper on "Results of Operations, Especially Abdominal, Performed on the Principle of Anoci-Association." Discussed by Drs. G. S. Reed, Syracuse, N. Y.; Joseph C. Bloodgood, Baltimore; James H. Ford, Indianapolis, and G. W. Crile, Cleveland.

Dr. J. M. Flint, New Haven, Conn., read a paper on "Physiologic Basis for Thoracic Operations."

Dr. S. Robinson, Boston, read a paper on "Surgery of Chronic Infectious Diseases of the Lung."

Dr. E. M. von Eberts, Montreal, read a paper on "Obliteration of Empyemic Cavities."

These three papers were discussed by Drs. W. Meyer, New York; Thomas, Philadelphia; Carl Beck, Chicago; S. Robinson, Boston; E. M. von Eberts, Montreal.

Dr. W. L. Rodman, Philadelphia, read a paper on "Abnormal Involution of Mammary Gland." Discussion by Drs. Wathen (?) Louisville, Ky.; M. F. Porter, Ft. Wayne, Ind.; J. Mitchell, Washington, D. C.; J. C. Bloodgood, Baltimore; Parker Syms, New York; T. W. Huntington, San Francisco; W. L. Rodman, Philadelphia.

WEDNESDAY, JUNE 5—MORNING

Dr. J. S. Horsley, Richmond, Va., read a paper on "A New Method of Suturing Blood-Vessels." No discussion.

Drs. E. Martin and C. K. Mills, Philadelphia, read a paper on "Asphasia and Agraphia in Some of Their Practical Surgical Relations." Discussed by Dr. C. K. Mills, Philadelphia.

Dr. A. Carrel, New York, read a paper on "Preservation of Tissues, and Its Application in Surgery." Discussed by Drs. J. S. Davis, Baltimore; F. H. Albee, New York, and A. Carrel, New York.

Dr. H. S. Plummer, Rochester, Minn., read a paper on "Cardiospasm; Report of One Hundred Cases." Discussed by Drs. J. Meyer, St. Louis; M. Einhorn, New York; A. Bassler, New York, and H. S. Plummer, Rochester, Minn.

Dr. W. D. Haggard, Nashville, Tenn., read a paper on "Tumors of the Small Intestine." Discussed by Drs. D. Stetten, New York, and A. W. McGlannan, Baltimore.

Dr. J. A. Hartwell read a paper by himself and Dr. J. P. Hoguet, New York, on "Experimental Intestinal Obstruction." Discussed by Drs. G. H. Whipple, Baltimore; B. Vincent, Boston; A. McLean, Detroit; J. S. Horsley, Richmond, Va.; F. D. Gray, Jersey City, N. J.; M. Einhorn, New York, and J. A. Hartwell, New York.

Dr. J. C. Bloodgood, Baltimore, read a paper on "The Relation of the Duodenum to Surgery of the Stomach and Colon." Discussed by Dr. J. W. Draper, Rochester, Minn.

WEDNESDAY, JUNE 5—AFTERNOON

Dr. T. Rovsing, Copenhagen, Denmark, read a paper on "Gastroptosis and Its Surgical Treatment."

Dr. W. B. Cannon, Boston, read a paper on "The Functions of the Large Intestine."

Dr. A. D. Bevan, Chicago, read a paper on "Dilatation of the Large Bowel."

Dr. M. L. Harris, Chicago, read a paper on "Adhesions of the Colon."

Dr. J. F. Binnie, Kansas City, Mo., read a paper on "Colonic Intoxication."

Dr. C. H. Mayo, Rochester, Minn., read a paper on "Diverticulæ of the Gastro-Intestinal Tract and Their Surgical Importance."

Dr. K. A. J. McKenzie, Portland, Ore., read a paper on "The Rôle of the Movable Kidney in Vascular and Intestinal Stasis."

These seven papers were discussed by Drs. J. Goldthwait, Boston; J. N. Jackson, Kansas City, Mo.; T. Rovsing, Copenhagen, and W. J. Mayo, Rochester, Minn.

Dr. Bevan moved that the Section on Surgery extend a vote of thanks to Dr. Rovsing, for his splendid paper. Seconded and carried.

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THURSDAY, JUNE 6—MORNING

The following officers were nominated and elected: Chairman, Dr. A. F. Jonas, Omaha, Neb.; Vice-Chairman, Dr. W. L. Cousins, Portland, Me.; Secretary, Dr. Dean Lewis, Chicago; Orator in Surgery, Dr. W. D. Haggard, Nashville, Tenn.; Delegate, LeMoyne Mille, Los Angeles, Cal.

Dr. W. Bartlett, St. Louis, read a paper on "Further Experimental and Clinical Work Bearing on the Value of Lane's Bone Plate."

Dr. F. J. Cotton, Boston, read a paper on "Operative Treatment in Joint Fractures."

Dr. W. Darrach, New York, read a paper on "Operative Treatment of Fractures and Dislocations."

Dr. L. W. Ely, Denver, read a paper on "Surgery of Bones and Joints."

These four papers were discussed by Drs. J. B. Murphy, Chicago; J. B. Walker, New York; J. E. Moore, Minneapolis; A. J. Ochsner, Chicago; F. H. Albee, New York; H. W. McGlannan, Baltimore; T. W. Huntington, San Francisco; W. Bartlett, St. Louis; F. J. Cotton, Boston; W. Darrach, New York, and L. W. Ely, Denver.

Dr. R. A. Hibbs, New York, read a paper on "An Operation for Potts' Disease of the Spine." Discussed by Drs. T. W. Huntington, New York; F. H. Albee, New York; Casper, (?), Louisville, Ky., and R. H. Hibbs, New York.

THURSDAY, JUNE 6—AFTERNOON

The following papers were read as a Symposium on Internal Secretions at a joint meeting with the Section on Practice of Medicine:

Dr. H. Cushing, Baltimore: "The Influence of the Secretion of the Pituitary Gland."

Dr. J. H. Pratt, Boston: "The Internal Secretion of the Pancreas."

Dr. D. Marine, Cleveland: "The Anatomic and Physiologic Effect of Iodin on the Thyroid of Exophthalmic Goiter."

Dr. S. J. Meltzer, New York: "The Functional Activities of the Adrenals."

Dr. W. G. McCallum, New York: "Function of the Parathyroid Glands."

The five papers in this symposium were discussed by Drs. C. H. Mayo, Rochester, Minn.; H. S. Plummer, Rochester, Minn.; G. W. McCaskey, Ft. Wayne, Ind.; L. B. Wilson, Rochester, Minn.; J. H. Pratt, Boston; D. Marine, Cleveland, and W. G. McCallum, New York.

FRIDAY, JUNE 7—MORNING

Dr. J. H. Gibbon, Philadelphia, read a paper on "Further Experience with Aneurysmorrhaphy (Matas)." Discussed by Drs. C. A. Powers, Denver; J. F. Binnie, Kansas City, Mo.; Ford, (?) U. S. Army; J. S. Horsley, Richmond, Va.; M. Ballin, Detroit; T. W. Huntington, San Francisco, and J. H. Gibbon, Philadelphia.

Dr. A. G. Sullivan, Madison, Wis., read a paper on "Reconstruction of the Bile-Ducts." No discussion.

Dr. W. D. Gatch, Indianapolis, read a paper on "Certain Problems of Intestinal Anastomosis; an Experimental Study." Discussed by Drs. F. G. Connell, Oshkosh, Wis.; A. L. Soresi, New York; F. D. Gray, Jersey City, N. J.; O. C. Smith, Hartford, Conn.; T. W. Huntington, San Francisco; W. Bartlett, St. Louis; F. T. Murphy, St. Louis; W. D. Haggard, Nashville, Tenn., and W. D. Gatch, Indianapolis.

Dr. H. D. Kistler, Butte, Mont., read a paper on "Thrombophlebitis of the Left Leg." Discussed by Drs. H. A. Royster, Raleigh, N. C., and H. D. Kistler, Butte, Mont.

## SECTION ON OBSTETRICS AND GYNECOLOGY

TUESDAY, JUNE 4—AFTERNOON

The Section was called to order at 2:15 p. m., in the Ball-Room of the Steel Pier, by the Chairman, Dr. C. Jeff Miller, New Orleans.

Dr. Miller read the Chairman's address on "The Present Status of the Surgical Treatment of Puerperal Pyemia by Ligation or Excision of Thrombosed Veins."

Dr. R. R. Huggins, Pittsburgh, read "The Ligation or Excision of the Ovarian or Deep Pelvic Veins in the Treatment of Puerperal Thrombophlebitis." Discussed by Drs. Hiram Vineberg, New York; H. J. Boldt, New York; C. O. Thienhaus, Milwaukee, Wis.; T. J. Watkins, Chicago, and R. H. Huggins, Pittsburgh.

Dr. John B. Deaver, Philadelphia, read a paper on "Hysterotomy." Discussed by Drs. E. G. Zinke, Cincinnati; J. B. DeLee, Chicago; H. J. Boldt, New York; E. E. Montgomery, Philadelphia; A. Goldspohn, Chicago; C. S. Bacon, Chicago; C. L. Hall, Kansas City, Mo.; S. M. D. Clark, New Orleans; J. A. McGlinn, Philadelphia; J. H. Carstens, Detroit; T. S. Cullen, Baltimore; Coe, and J. B. Deaver, Philadelphia.

Dr. J. Riddle Goffe, New York, read a paper on "Intra-Abdominal Pressure and the Dynamics of the Female Pelvis." Discussed by Drs. G. H. Noble, Atlanta, Ga.; A. Sturmdorf, New York; A. Goldspohn, Chicago, and J. R. Goffe, New York.

Dr. Walter B. Dorsett, St. Louis, read a paper on "A Simple Operation for Repair of the Female Perineum Based on the Anatomy of the Parts (Illustrated with Lantern Slides)." Discussed by Drs. E. J. Ill, Newark, N. J.; G. H. Noble, Atlanta, Ga.; J. B. DeLee, Chicago; A. Goldspohn, Chicago, and W. B. Dorsett, St. Louis.

Dr. George B. Somers, San Francisco, read a paper on "Uterovaginal Prolapse in Elderly Women; Technic of the Operation (Illustrated with Lantern Slides)." Discussed by Drs. J. H. Carstens, Detroit; J. W. Bovée, Washington, D. C.; C. L. Hall, Kansas City, Mo.; C. O. Thienhaus, Milwaukee, Wis.; H. J. Boldt, New York; R. S. Morton, New York; C. M. Echols, Milwaukee, Wis.; J. R. Goffe, New York; G. H. Noble, Atlanta, Ga.; Cotter; W. O. Henry, Omaha; W. B. Chase, Brooklyn, and G. B. Somers, San Francisco.

WEDNESDAY, JUNE 5—MORNING

Dr. Walter B. Chase, Brooklyn, read a paper on "The Resistance of the Patient as a Guide to Operative Procedures." Discussed by Drs. Wade; H. G. Wetherill, Denver; H. J. Boldt, New York; T. S. Cullen, Baltimore, and W. B. Chase, Brooklyn.

Dr. Horace G. Wetherill, Denver, read a paper on "Incomplete Abdominal Surgery." Discussed by Drs. J. C. Bloodgood, Baltimore; Moore; C. O. Hall, Kansas City, Mo.; W. B. Chase, Brooklyn; H. O. Pantzer, Indianapolis; T. S. Cullen, Baltimore; C. A. L. Reed, Cincinnati; Weber; G. E. Shoemaker, Philadelphia, and H. G. Wetherill, Denver.

Dr. W. Francis B. Wakefield, San Francisco, read a paper on "A Plea for More Careful Technic in Doing Intrapelvic Reconstructive Work." Discussed by Drs. Frank T. Andrews, Chicago; T. J. Watkins, Chicago, and W. O. Henry, Omaha, Neb.

Dr. Curtis F. Burnam, Baltimore, read a paper on "Corpus Luteum Extract, with Suggestions as to Its Use in Gynecologic Practice." Discussed by Drs. John M. Rogers, New York; Charles H. Mayo, Rochester, Minn.; S. M. D. Clark, New Orleans; J. C. Litzenberg, Minneapolis; Novak, and C. F. Burnam, Baltimore.

Dr. Charles A. L. Reed, Cincinnati, read a paper on "The Relation of Pelvic Conditions to Intestinal Displacement in Women." Discussed by Drs. Richard R. Smith, Grand Rapids, Mich.; J. H. Carstens, Detroit; Jackson; Albee; Morris, Marcy, Dorsett, J. B. Deaver, Philadelphia; Benjamin; C. O. Thienhaus, Milwaukee, Wis., and C. A. L. Reed, Cincinnati.

Dr. John G. Clark, Philadelphia, read a paper on "The Coincidence of Cholelithiasis with Gynecologic Diseases." Discussed by Drs. Charles H. Mayo, Rochester, Minn.; Wathen; J. B. Deaver, Philadelphia; Fussell; Marcy; Morris; Truesdale; Benjamin; and John G. Clark, Philadelphia.

WEDNESDAY, JUNE 5—AFTERNOON

Drs. J. Riddle Goffe, New York, and Rufus Hall, Cincinnati, were appointed to make up the Nominating Committee.

Dr. Lewis S. McMurtry, Louisville, Ky., read a paper on "Intestinal Complications in Gynecologic Operations." Discussed by Drs. J. W. Bovée, Washington, D. C.; Wathen; J. H. Carstens, Detroit; Marcy; and L. S. McMurtry, Louisville, Ky.

Dr. T. J. Watkins, Chicago, read a paper by himself and Dr. A. H. Curtis, Chicago. Discussed by Drs. David J. Davis, Chicago; H. J. Boldt, New York; J. O. Polak, Brooklyn; C. O. Thienhaus, Milwaukee, Wis.; J. B. DeLee, Chicago; Boyd;

Burns; E. G. Zinke, Cincinnati; Chandler; J. A. McGlinn, Philadelphia; Ritter; Wilmuth; and T. J. Watkins, Chicago.

Dr. Herman J. Boldt, New York, read a paper on "Inflammation of the Fallopian Tubes." Discussed by Dr. R. Hall, Cincinnati.

The following resolution offered by Dr. Joseph B. DeLee, Chicago, was seconded and carried:

That a committee of three be appointed by the Chair to determine if or not, the uterus should be emptied in cases of infection, with retained secundines, and if so when.

The Chair subsequently appointed: Dr. J. B. DeLee, Chicago, Chairman; Dr. Robert L. Dickinson, New York; Dr. Edward P. Davis, Philadelphia.

Dr. J. Wesley Bovée, Washington, D. C., read a paper on "Gynecologic Drainage." Discussed by Drs. John G. Clark; Marcy; J. H. Carstens, Detroit; F. J. Blondke, St. Paul, Minn.; L. S. McMurtry, Louisville, Ky., and J. Wesley Bovée, Washington, D. C.

Dr. John O. Polak, Brooklyn, read a paper entitled "A Further Study of the End Results of the Conserved Ovary." Discussed by Dr. LeRoy Broun, New York, and continued by Drs. Dorsett; H. J. Boldt, New York; F. J. Taussig, St. Louis; Watkins; H. O. Marcy, Boston; H. P. Newman, San Diego, Cal.; W. B. Dorsett, St. Louis, and J. O. Polak, Brooklyn.

### THURSDAY, JUNE 6—MORNING

The following report of the Nominating Committee was accepted and the gentlemen named elected: Chairman, Dr. F. F. Simpson, Pittsburgh; Vice-Chairman, Dr. Joseph B. DeLee, Chicago; Secretary, Dr. Brooke M. Anspach, Philadelphia; Delegate, Dr. Thomas S. Cullen, Baltimore.

The following resolution was offered by Dr. Robert L. Dickinson, Brooklyn, was carried and directed to be sent to the House of Delegates:

That this Section recommend the endorsement of a standard metal buttonhole bar or label of small size, bearing the name of the member and his home city.

The report of the Committee on Obstetric Terminology was accepted as follows:

That the Basel Anatomic Nomenclature (BNA) be accepted as essentially correct Latin for all anatomic terms used in obstetrics and given in the BNA.

In connection with this report, Dr. Robert L. Dickinson, Brooklyn, called attention to a pamphlet issued by the Bellevue Hospital embodying the international nomenclature, and the short Bellevue nomenclature adapted to general use. Dr. Dickinson further moved that the present Committee on Obstetric Terminology be enlarged both as to membership and scope so as to include gynecologic diseases and injuries and the nomenclature of operations.

The resolution was seconded and carried and the following additions to the committee made by the Chair: Drs. Robert L. Dickinson, Brooklyn; Thomas S. Cullen, Baltimore, and Henry P. Newman, San Diego, Cal.

Dr. C. S. Bacon, Chicago, read a paper on "Pulmonary Tuberculosis Complicating Pregnancy." Discussed by Dr. C. L. Minor, Asheville, N. C., and continued by Drs. Brinckner, Dickinson, Brooklyn; Stole; J. C. Litzenberg, Minneapolis; Gates; Burns; H. G. Wetherill, Denver; Brinckner; and closed by Dr. C. S. Bacon, Chicago.

Dr. J. B. Swift, Boston, read a paper by himself and Dr. Franklin S. Newell on "Cardiac Complications of Pregnancy and Labor." Discussed by Drs. Alfred Stengel, Philadelphia, and H. C. Bailey, New York.

Dr. Harold C. Bailey, New York, read a paper by himself and Dr. J. R. Murlin, New York, on "Proteid Metabolism in Pregnancy and the Puerperium." Discussed by Drs. Edward P. Davis, Philadelphia, and H. C. Bailey, Philadelphia.

Dr. Joseph B. DeLee, Chicago, read a paper on "Nephritis in Pregnancy." Discussed by Drs. Henry Schwarz, St. Louis, and J. B. DeLee, Chicago.

Dr. Edward P. Davis, Philadelphia, read a paper on "Drainage of the Kidney, by Incision, for Bacillus Coli Communis Infection in Pregnant and Parturient Patients, with Report of Cases." Discussed by Drs. C. F. Burnam, Baltimore; C. S. Bacon, Chicago; H. D. Furniss, New York; Linder; and E. P. Davis, Philadelphia.

Dr. Palmer Findley, Omaha, read a paper on "Appendicitis Complicating Pregnancy, Labor and Puerperium." Discussed by Dr. John B. Murphy, Chicago.

### THURSDAY, JUNE 6—AFTERNOON

Dr. Ross McPherson, New York, read a paper on "The Radical Treatment of Abortion with Results in 3,500 Cases from the Wards of the New York Lying-In Hospital." Discussed by Drs. J. M. Baldy, Philadelphia; F. J. Taussig, St. Louis; Hayden; H. Schwarz, St. Louis, and Ross McPherson, New York.

Dr. Harold A. Miller, Pittsburgh, read a paper on "Difficult and Dangerous Labors; Selecting the Method of Delivery."

Dr. Charles A. Stillwagen, Pittsburgh, read a paper on "Cesarean Section."

These two papers were discussed by Drs. Richard C. Norris, Philadelphia; E. E. Montgomery, Philadelphia; Ross McPherson, New York; E. G. Zinke, Cincinnati; H. Schwarz, St. Louis; Burns; C. S. Bacon, Chicago; M. M. Lucid, Cortland, N. Y.; W. M. Sprigg, Washington, D. C.; A. J. Rongy, New York; H. A. Miller and C. A. Stillwagen, Pittsburgh.

Drs. Robert L. Dickinson and Walter Truslow, Brooklyn, N. Y., read a paper on "Averages in Attitude and Trunk Development in Women and Their Relation to Pain." Discussed by Dr. Robert B. Osgood, Boston.

The appointment was announced of Dr. Palmer Findley, Omaha, as Alternate Delegate.

### FRIDAY, JUNE 7.—MORNING

Dr. Sidney A. Chalfant, Pittsburgh, read a paper on "Acetonuria; Its Relation to Postoperative Vomiting in 700 Cases of Ether Anesthesia." Discussed by Drs. John M. Swan, Rochester, N. Y., and Sidney A. Chalfant, Pittsburgh.

Dr. P. Brooke Bland, Philadelphia, read a paper on "Sarcoma of the Vagina." Discussed by Drs. Kepler, Boston, and P. B. Bland, Philadelphia.

Dr. Fred. J. Taussig, St. Louis, read a paper on "Gynecologic Disease in the Insane." Discussed by Drs. T. M. T. McKennan, Pittsburgh; Kepler; Cohn; W. Manton, Detroit; G. L. Hunner, Baltimore; Hardenberger, and F. J. Taussig, St. Louis.

Dr. Henry D. Furniss, New York, read a paper on "Some Types of Ureteral Obstruction in Women." Discussed by Drs. Guy L. Hunner, Baltimore; Toby; Henry D. Furniss, New York.

Dr. C. J. Ladinski, New York, read a paper on the "Treatment of Tubal Gestation." Discussed by Drs. Brooks H. Wells, New York; Brinckner; Manton, and L. J. Ladinski, New York.

On motion, the paper of Dr. Barton Cooke Hirst was referred to the Executive Committee.

Dr. Manton reported that the House of Delegates had granted the change in the name of the Section to "The Section of Obstetrics, Gynecology and Abdominal Surgery."

On motion of Dr. S. A. Chalfant, Pittsburgh, a vote of thanks was tendered the Local Committee on Arrangements for their work for the Section. The motion was amended to include the Chairman and Secretary of the Section.

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## SECTION ON DISEASES OF CHILDREN

### TUESDAY, JUNE 4—AFTERNOON

The meeting was called to order at 2 p. m., in Masonic Hall, by the chairman, Dr. Isaac A. Abt, Chicago. Dr. Abt then delivered his address.

Dr. J. P. Crozier Griffith, Philadelphia, read a paper on "The Ability of Women to Nurse their Children."

Dr. H. M. McClanahan, Omaha, read a paper on "Supplemental Breast-Feeding in Infants."

These two papers were discussed by Drs. David E. English, Summit, N. J.; Henry J. Gramling, Milwaukee, Wis.; Thomas S. Southworth, New York; Frank S. Churchill, Chicago; George D. Scott, New York; T. L. Harrington, Milwaukee, Wis.; Charles Douglas, Detroit; Francis P. Denny, Brookline, Mass.; John Zahorsky, St. Louis; Jules M. Brady, St. Louis, and J. P. Crozer Griffith, Philadelphia.

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Dr. J. C. Litzenberg, Minneapolis, read a paper on "Long-Interval Feeding of Premature Infants."

Dr. Julius H. Comroe, York, Pa., read a paper on "A Plea for Longer Intervals in Milk-Feeding."

These two papers were discussed by Drs. H. Lowenburg, Philadelphia; D. J. M. Miller, Atlantic City, N. J.; John L. Morse, Boston; L. T. Royster, Norfolk, Va.; David E. English, Summit, N. J.; J. H. Hess, Chicago; Thomas S. Southworth, New York; L. R. DeBuys, New Orleans; John Zahorsky, St. Louis; I. A. Abt, Chicago; J. H. Comroe, York, Pa., and J. S. Litchenberg, Kansas City, Mo.

Dr. John Lovett Morse, Boston, read a paper on "Intestinal Toxemia in the New-Born." Discussed by Drs. David E. English, Summit, N. J.; A. L. Goodman, New York; H. Lowenburg, Philadelphia; Thomas B. Cooley, Detroit; Frank S. Churchill, Chicago; George D. Scott, New York; Herbert M. Rich, Detroit, and John Lovett Morse, Boston.

Dr. J. Ross Snyder, Birmingham, Ala., read a paper on "Pellagra in Children." Discussed by Drs. W. W. Butterworth, New Orleans, and H. M. McClanahan, Omaha.

### WEDNESDAY, JUNE 5—MORNING

Dr. Jules M. Brady, St. Louis, read a paper on "The Use of Polycarbohydrates in the Diet of the Young Infant."

Dr. Louis Fischer, New York, read a paper on "Clinical Notes from the Willard Parker Hospital, New York; Intestinal Intoxication."

Dr. Frank C. Neff, Kansas City, Mo., read a paper on "A Series of Infants Fed on a High Percentage Albumin Milk."

Dr. A. L. Goodman, New York, read a paper on "Ileocolitis with Meningeal Symptoms."

These four papers were discussed by Drs. Zahorsky, St. Louis; Charles Douglas, Detroit; J. H. Hess, Chicago; John Lovett Morse, Boston; L. T. Royster, Norfolk, Va.; H. Schwartz, New York; T. S. Southworth, New York; H. Lowenburg, Philadelphia; Roger H. Dennett, New York; Louis Fischer, New York; John Zahorsky, St. Louis; I. M. Brady, St. Louis, and F. C. Neff, Kansas City, Mo.

Dr. Bernard Fantus, Chicago, presented some specimens of "candy medication" of various drugs for administration to children.

Dr. Thomas S. Southworth, New York, read a paper on "The Menace to the Young Child of the Common Infectious Cold." Discussed by Drs. David E. English, Summit, N. J.; John Zahorsky, St. Louis; H. M. McClanahan, Omaha; G. D. Scott, New York; L. Kerr, Brooklyn; J. P. Sedgwick, Minneapolis, and T. S. Southworth, New York.

Dr. Henry Dwight Chapin, New York, read a paper on "The Properties, Uses and Indications of the Various Carbohydrates in Infant Feeding." Discussed by Drs. Charles Douglas, Detroit; J. P. C. Griffith, Philadelphia; L. T. Royster, Norfolk, Va., and H. D. Chapin, New York.

### WEDNESDAY, JUNE 5—AFTERNOON

Dr. Oscar M. Schloss, New York, read a paper on "Allergy to Common Foods (1) Idiosyncrasy to Hens' Eggs." Discussed by Drs. J. L. Morse, Boston, D. J. M. Miller, Atlantic City, N. J.; R. H. Dennett, New York; John Zahorsky, St. Louis; Charles Douglas, Detroit; H. M. Rich, Detroit; I. A. Abt, Chicago, and O. M. Schloss, New York.

Dr. Fritz B. Talbot, Boston, read a paper on "Tabes Mesenterica in Infants and Young Children." Discussed by Drs. C. H. Johnston, Grand Rapids, and F. B. Talbot, Boston.

Dr. J. P. Crozer Griffith, of Philadelphia, showed a new breast-shield called "infantibus."

Dr. Roger H. Dennett, New York, read a paper on "The Caloric Requirements of Bottle-Fed Infants." Discussed by Drs. G. R. Pisek, New York; F. B. Talbot, Boston; Charles Douglas, Detroit; J. L. Morse, Boston; H. D. Chapin, New York, and R. H. Dennett, New York.

Dr. Thomas B. Cooley, Detroit, read a paper on "The Relation of the Infant Welfare Movement to Pediatries." Discussed by Drs. Charles Douglas, Detroit; G. R. Pisek, New York; C. H. Johnston, Grand Rapids; L. Kerr, Brooklyn; Howe (?), Albany (?); H. M. McClanahan, Omaha; T. L. Harrington, Milwaukee; John Zahorsky, St. Louis, and T. B. Cooley, Detroit.

Dr. Maurice Ostheimer, Philadelphia, read a paper on "The Value of the Social Service Department to the Children's Dispensary." Discussed by Drs. H. J. Gramling, Milwaukee; M. H. Fussell, Philadelphia; T. B. Cooley, Detroit; D. J. M. Miller, Atlantic City; Charles Douglas, Detroit, and M. Ostheimer, Philadelphia.

Dr. LeGrand Kerr, Brooklyn, read a paper on "Some Reasons for Surgical Failures in Children." Discussed by Drs. F. C. Neff, Kansas City, Mo.; F. W. Pinneo, Newark, N. J., and H. J. Gramling, Milwaukee.

Dr. T. A. Williams, Washington, D. C., read a paper on "Juvenile Psychasthenia." Discussed by Drs. John Zahorsky, St. Louis, and T. A. Williams, Washington, D. C.

### THURSDAY, JUNE 6—MORNING

Dr. Thomas S. Southworth, Chairman Executive Committee, reported the following nominations for the succeeding year: Chairman, Dr. Henry Dwight Chapin, New York; Vice-Chairman, Dr. D. J. M. Miller, Atlantic City, N. J.; Secretary, Dr. Frank C. Neff, Kansas City, Mo., and Delegate, Dr. Charles Douglas, Detroit.

It was moved and seconded that the report of the Executive Committee be accepted. Unanimously carried.

Dr. Richard M. Smith, Boston, read a paper on "Methods of Estimating Kidney Function." No discussion.

Dr. L. T. Royster, Norfolk, Va., read a paper on "Influence of Climate on Summer Diarrhea of Infants." Discussed by Drs. B. R. Hoobler, New York; G. R. Pisek, New York; H. Schwartz, New York; Rawley (?); W. W. Butterworth, New Orleans; John Zahorsky, St. Louis; C. H. Johnston, Grand Rapids; C. Douglas, Detroit; T. B. Cooley, Detroit; T. D. Parke, Birmingham, Ala., and L. T. Royster, Norfolk, Va.

Dr. Thomas D. Parke, Birmingham, Ala., read a paper on "The Effect on Later Development of Severe and Prolonged Illness in Infancy." No discussion.

Dr. L. R. DeBuys, New Orleans, read a paper on "Exophthalmos in Scorbutus." Discussion by Drs. H. M. McClanahan, Omaha; W. W. Butterworth, New Orleans, and L. R. DeBuys, New Orleans.

Dr. Frank W. Pinneo, Newark, N. J., read a paper on "Anesthesia by Pharyngeal Insufflation." Discussed by Drs. J. T. Gwathmey, New York; W. C. Woolsey, Brooklyn, and F. W. Pinneo, Newark, N. J.

### THURSDAY, JUNE 6—AFTERNOON

Dr. F. M. Pottenger, Monrovia, Cal., read a paper on "The Relationship Between the Tuberculous Infection in the Child and Clinical Tuberculosis in the Adult." Discussed by Drs. C. G. Amende, New York; S. A. Knopf, New York; Karl Von Ruck, Asheville, N. C.; W. J. Durell, New Orleans; Ritter, (?); H. F. Stoll, Hartford, Conn.; J. H. McKee, Philadelphia, and F. E. M. Pottenger, Monrovia, Cal.

Dr. B. Raymond Hoobler, New York, read papers on "An Automatic Device for Reading Systolic and Diastolic Blood-Pressure in Children," with demonstration of apparatus and "The Effect of Cold Air on the Blood-Pressure of Tuberculous Children." Discussed by Drs. F. M. Pottenger, Monrovia, Cal.; Ritter, (?); B. R. Hoobler, New York.

Dr. Henry F. Stoll, Hartford, Conn., read a paper on "The Diagnosis of Enlarged Bronchial Glands." Discussed by Drs. Ritter, (?); D. J. M. Miller, Atlantic City; G. P. Pisek, New York; B. R. Hoobler, New York, and H. F. Stoll, Hartford, Conn.

Dr. H. Lowenburg, Philadelphia, read a paper on "The Hypodermic Injection of Hematinics in the Treatment of Anemia in Children, with Report of Cases." Discussed by Drs. J. Zahorsky, St. Louis, and H. Lowenburg, Philadelphia.

Dr. Charles Hendee Smith, New York, demonstrated a graphic milk-chart to obtain any combination of fat and proteid. Discussed by Drs. B. R. Hoobler, New York; W. W. Butterworth, New Orleans, and D. J. M. Miller, Atlantic City, N. J.

Dr. Butterworth moved that a vote of thanks be extended to the Chairman and Secretary for the excellent program; also to the readers of the various papers.

Dr. Miller seconded the motion, which was unanimously carried.

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## SECTION ON GENITO-URINARY DISEASES

### TUESDAY, JUNE 4—AFTERNOON

The meeting was called to order at 2:20 p. m., the Chairman, Dr. William T. Belfield, Chicago, presiding.

Dr. R. F. O'Neil, Boston, was selected to represent the Section in the House of Delegates.

The following papers were read as a Symposium on Tests of Kidney Function:

Dr. B. A. Thomas, Philadelphia: "The Results of Two Hundred Chromo-Ureteroscopies Employing Indigocarmin as a Functional Kidney Test."

Drs. Martin Krotoszyner and George W. Hartman, San Francisco: "The Practical Value of Blood Cryoscopy for Determination of Renal Function."

Dr. John T. Geraghty, Baltimore: "A Study of the Accuracy of the Phenolsulphonephthalein Test for Renal Function."

The three papers in this symposium were discussed by Drs. Charles E. Barnett, Fort Wayne, Ind.; Francis R. Hagner, Washington, D. C.; William H. Schmidt, Atlantic City; H. D. Furniss, New York; L. E. Schmidt, Chicago; Edwin Beer, New York; Hugh H. Young, Baltimore; A. J. Crowell, Charlotte, N. C.; B. A. Thomas, Philadelphia; M. Krotoszyner, San Francisco, and J. T. Geraghty, Baltimore.

The following papers were read as a Symposium on Renal Surgery and Pathology:

Dr. Thorkild Rovsing, Copenhagen, Denmark: "Renal Tuberculosis, Early and Late Phases."

Dr. George S. Whiteside, Portland, Ore.: "The Use of Tuberculin in the Treatment of Urogenital Tuberculosis."

These two papers were discussed by Drs. Arthur T. Cabot, Boston; William T. Belfield, Chicago; Hugh H. Young, Baltimore; Guy L. Hunner, Baltimore, and T. Rovsing, Copenhagen.

Dr. A. Raymond Stevens, New York: "Pathologic Lesions (Non-Congenital) Associated with Double Ureter. Report of an Unusual Case." Discussed by Drs. Hugh H. Young, Baltimore; Edwin Beer, New York; J. B. Roxby, Swathmore, Pa., and A. R. Stevens, New York.

### WEDNESDAY, JUNE 5—MORNING

Dr. B. Alexander Randall, Philadelphia, read a paper on "Unilateral Renal Hematuria."

Dr. John H. Cunningham, Jr., Boston, read a paper on "Influence of the Operation of Resection of the Kidney on the Function of the Organ."

Dr. Hugh Cabot, Boston, read a paper on "The Diagnosis and Indications for Operation in Early Hydronephrosis. Definition of Hydronephrosis."

Drs. John W. Draper and W. F. Braasch, Rochester, Minn., read a paper on "The Function of the Ureterovesical Valve. An Experimental Study Regarding the Feasibility of Ureteral Meatotomy in Human Beings."

These four papers were discussed by Drs. D. H. Stewart, New York; Arthur T. Cabot, Boston; C. W. Hunter, Norfolk, Va.; Martin Krotoszyner, San Francisco; Guy L. Hunner, Baltimore; H. D. Furniss, New York; Francis R. Hagner, Washington, D. C.; Edwin Beer, New York; John H. Cunningham, Jr., Boston; Edgar G. Ballenger, Atlanta, Ga.; A. J. Crowell, Charlotte, N. C.; B. A. Randall, Philadelphia; H. Cabot, Boston, and J. W. Draper, Rochester, Minn.

The following papers were read as a Symposium on Treatment of Tumors of the Bladder:

Dr. Edwin Beer, New York: "The Treatment of Papillary Tumors of the Urinary Bladder with the High-Frequency Current (Oudin)."

Dr. R. F. O'Neil, Boston: "Cancer of the Bladder."

Dr. E. S. Judd, Rochester, Minn.: "The Surgical Treatment of Tumors of the Bladder."

Dr. Francis R. Hagner, Washington, D. C.: "Surgical Treatment of Malignant Tumors of the Bladder Affecting the Fundus or Lateral Walls."

The four papers of this symposium were discussed by Drs. C. M. Harpster, Toledo, Ohio; B. A. Thomas, Philadelphia; W. E. Lower, Cleveland, Ohio; A. L. Chute, Boston; A. G. Rytina, Baltimore; E. O. Smith, Cincinnati; E. Beer, New York; R. F. O'Neil, Boston; E. S. Judd, Rochester, Minn., and F. R. Hagner, Washington, D. C.

### WEDNESDAY, JUNE 5—AFTERNOON

Dr. Hugh H. Young, Baltimore, called attention to the desirability of sending copies of the Transactions of this Section abroad to journals, libraries and prominent men, and said that this could be done if the members would subscribe one hundred dollars.

The following papers were read as a Symposium on Treatment of Vesical Calculus:

Dr. W. E. Lower, Cleveland, Ohio: "Suprapubic Cystotomy for Vesical Calculi. Indications and Operative Procedure."

Dr. Arthur Tracy Cabot, Boston: "Litholapaxy; the Operation of Choice for the Removal of Stone in the Bladder."

The two papers of this symposium were discussed by Drs. John Myers Swan, Canton, China; A. L. Chute, Boston; Hugh H. Young, Baltimore; Louis E. Schmidt, Chicago; Eugene Fuller, New York; George S. Whiteside, Portland, Ore.; William T. Belfield, Chicago; G. T. Cabot, Boston, and W. E. Lower, Cleveland.

Dr. D. S. Fairchild, Clinton, Iowa, read a paper on "Decapsulation of the Kidney." Discussed by Drs. A. C. Wood, Philadelphia; Louis E. Schmidt, Chicago; Victor G. Vecki, San Francisco, and D. S. Fairchild, Clinton, Iowa.

The following papers were read as a Symposium on Obstacles to Evacuation of the Bladder:

Dr. Charles H. Chetwood, New York: "Contracture of the Neck of the Bladder."

Dr. Hugh Hampton Young, Baltimore: "A New Procedure (Punch Operation) for Small Prostatic Bars and Contracture of the Prostatic Orifice."

Dr. Charles M. Harpster, Toledo, Ohio: "Prostatotomy by the Goldschmidt Method."

Dr. John B. Deaver, Philadelphia: "Impermeable Stricture of Bulbomembranous Urethra (Impermeable to Passage of Instruments)."

The four papers of this symposium were discussed by Drs. G. F. McKim, Cincinnati; Eugene Fuller, New York; E. O. Smith, Cincinnati; Martin Krotoszyner, San Francisco; A. J. Crowell, Charlotte, N. C.; B. Alexander Randall, Philadelphia; C. H. Chetwood, New York; H. H. Young, Baltimore, and C. M. Harpster, Toledo, Ohio.

### THURSDAY, JUNE 6—MORNING

The Chairman announced that the plan of subscribing for copies of the Transactions to be sent abroad through the Smithsonian Institution, as suggested by the Secretary at yesterday's meeting, had received seventy-eight signatures. One hundred were necessary.

A member of the Executive Committee, Dr. Howard A. Kelly, was prevented from attending the meeting, and the chairman appointed Dr. Francis R. Hagner, Washington, D. C., in his place.

The following officers were elected for the ensuing year: Chairman, Dr. Hugh H. Young, Baltimore; Vice-Chairman, Dr. A. L. Chute, Boston, and Secretary, Dr. Louis E. Schmidt, Chicago.

The following papers were read as a Symposium on Genital Pathology and Surgery:

Dr. William T. Belfield, Chicago: "Chairman's Address: Hematogenous Disease of the Genital Organs in the Male."

Dr. Eugene Fuller, New York: "Seminal Vesiculotomy: Its Purpose and Accomplishments."

Dr. Robert H. Herbst, Chicago: "Treatment of Chronic Seminal Vesiculitis by Vasostomy (Belfield Operation)."

There was no discussion on this symposium.

Dr. Emil Goetsch, Baltimore, read a paper on "Influence of the Hypophysis on Growth and Development with Especial Reference to the Genito-Urinary System. Some Experimental and Clinical Facts."

Dr. Oswald S. Lowsley, Los Angeles, read a paper on "The Human Prostate Gland at Birth, with a Brief Discussion of Its Fetal Development. Demonstration of Enlarged Wax Reconstruction."

These two papers were discussed by Drs. Hugh H. Young, Baltimore, and O. S. Lowsley, Los Angeles.

Dr. T. B. Futcher, Baltimore, read a paper on "Recent Advances in Our Knowledge Concerning the Causes of Glyco-

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suria." Discussed by Drs. Robert T. Morris, New York; Emil Goetsch, Baltimore, and T. B. Futcher, Baltimore.

Dr. Ernest E. Irons, Chicago, read a paper on "Systemic Gonococcal Infections. A Cutaneous Gonococcus Reaction." Discussed by Drs. Charles E. Barnett, Fort-Wayne, Ind.; Louis E. Schmidt, Chicago, and E. E. Irons, Chicago.

Dr. Louis E. Schmidt, Chicago, read a paper on "Surgical Routes of Entrance to the Male Pelvis." No discussion.

THURSDAY, JUNE 6—AFTERNOON

The following papers were read as a Symposium on Syphilis:

Drs. Richard Dexter and C. L. Cummer, Cleveland: "The Importance of the Early Diagnosis of Syphilis."

Drs. Albert Keidel and S. H. Hurwitz, Baltimore: "A Comparison of Extracts of Syphilitic and Normal Tissues by Means of the Wassermann and Epiphanin Reactions."

These two papers were discussed by Drs. A. W. M. Ellis, New York; Kohn, New York; B. C. Corbus, Chicago; S. H. Hurwitz, and R. Dexter, Baltimore.

Dr. Arthur W. M. Ellis, New York: "Nerve Recurrences Following Treatment with Salvarsan."

Dr. B. C. Corbus, Chicago: "Four Years' Experience with the Wassermann Reaction in Practice. A Further Report of Cases Treated from the Standpoint of the Wassermann Reaction with Mercury Alone, with Salvarsan Alone, and by the Combined Method (Salvarsan and Mercury), Including a Preliminary Report on the Noguchi Luetin Skin Reaction."

Dr. Hideyo Noguchi, New York: "The Luetin Reaction."

These three papers were discussed by Drs. B. A. Thomas, Philadelphia; H. J. Nichols, U. S. Army, Washington, D. C.; H. Noguchi; A. J. Crowell, Charlotte, N. C., and B. C. Corbus, Chicago.

## SECTION ON OPHTHALMOLOGY

TUESDAY, JUNE 4—AFTERNOON

The Section on Ophthalmology convened in the West Solarium of the Hotel Marlborough-Blenheim, Atlantic City, at 2 p. m. with the Chairman, Dr. Adolf Alt, St. Louis, presiding.

Dr. Alt then read his address, on "Sympathetic Ophthalmia."

Dr. Casey Wood, Chicago, was appointed a member of the Executive Committee in place of Dr. Alvin Hubbell, Buffalo, deceased.

Dr. G. E. DeSchweinitz, Philadelphia, read a paper on "A Clinical Communication on Certain Visual Field Defects in Hypophysis Disease with Special Reference to Scotomas."

Dr. George S. Derby, Boston, read a paper on "Disease of the Optic Nerve in Myxedema: Its Relationship to the Thyroid Gland and to the Hypophysis."

These two papers were discussed by Drs. F. H. Verhoeff, Boston; F. Park Lewis, Buffalo, and T. B. Holloway, Philadelphia.

Dr. Arnold Knapp, New York, read a paper on "The Krönlein Operation as an Exploratory Procedure in Affections of the Orbit."

Dr. Martin B. Tinker, Ithaca, N. Y., read a paper on "The Surgical Treatment of Exophthalmos."

These two papers were discussed by Drs. James Bordley, Jr., Baltimore; Wells P. Eagleton, Newark, N. J.; Lucien Howe, Buffalo; W. C. Posey, Philadelphia; M. L. Foster, New York; Arnold Knapp, New York, and Martin B. Tinker, Ithaca, N. Y.

WEDNESDAY, JUNE 5—MORNING

The following instruments and appliances were presented and described:

Dr. William N. Souter, Portsmouth N. H.: Ophthalmometer adapted to measure the anterior and posterior surfaces of the crystalline lens as well as the cornea.

Dr. Nelson M. Black, Milwaukee: Instrument which adapts the electric light to perimetric measurements, the true spectroscopic colors being shown. Dr. Lucien Howe suggested an improvement in the form of a tube to inclose the electric light, which would enable the patient to look directly at the light without being confused or caused to move the eyes by the reflection of the light on the arc of the perimeter. This improvement makes the instrument a tropometer, as well as a perimeter. Head fixation and a face rim are necessary.

Dr. Mark D. Stevenson, Akron, O.: Lid-clamp of U shape, having its blades covered with rubber tubing, which can be used under local anesthesia without producing much pain. The clamp could be tightened from either side. It is similar to Dr. Wilder's instrument, but was used by Dr. Stevenson without the rubber tubing two years before being described by Dr. Wilder.

Dr. Stevenson also exhibited a small speculum for chalazion operations, etc., made of No. 10 snare wire. It could be improvised for each operation and might be easily regulated as to pressure.

Dr. David W. Wells, Boston: Curet for use in extirpation of the lacrimal sac, the handle of which is made of material of such flexibility that it can be adapted with the fingers to the cavity containing the sac while *in situ*.

Dr. Lucien Howe, Buffalo: Tonometer, consisting of a heavy base containing a clockwork arrangement which revolves a drum on an upright shaft. Another upright contains an arm holding a prism which can be slid up and down by the hand. The prism has attached to it a needle which, as the prism is raised or lowered, records the curve on the drum. The patient sits in front of the instrument, looking through the prism, which is raised until the patient sees a distant small light in duplicate. This represents the height of the curve. This is repeated until the record is complete.

Dr. Adolf Alt, St. Louis, exhibited under the microscope slides of an unidentified parasite which was found in the pus from an eye injured by a meat hook. Dr. Tiedeman, of Washington University, thought it was a claustridium, a parasite akin to the bacillus of malignant edema. The organism is spindle-shaped. Leukocytes in large numbers are seen. It is probably anaerobic as it was taken from the depths of the orbit and was not contaminated with outside organisms. Cultures were not obtained on any of the ordinary mediums tried. The staphylococcus was the only organism found in the cultures.

Dr. Walter Baer Weidler, New York, read a paper on "Pemphigus of the Conjunctiva; with the Report of a Case." Discussed by Drs. Casey A. Wood, Chicago; H. W. Woodruff, Joliet, Ill.; E. L. Jones, Cumberland, Md.; Joseph S. Lichtenberg, Kansas City, Mo.; W. E. Lambert, New York, and W. B. Weidler, New York.

Dr. E. L. Jones, Cumberland, Md., read a paper on "Subconjunctival Injections in Ophthalmic Surgery." Discussed by Drs. G. C. Savage, Nashville; L. Webster Fox, Philadelphia; A. E. Bulson, Jr., Fort Wayne, Ind.; William Zentmayer, Philadelphia; T. W. Moore, Huntington, W. Va.; R. L. Randolph, Baltimore; S. D. Risley, Philadelphia; H. W. Woodruff, Joliet, Ill.; J. A. Donovan, Butte, Mont.; Hiram Woods, Baltimore; D. W. Greene, Dayton, O.; Nelson M. Black, Milwaukee, and E. L. Jones, Cumberland, Md.

Dr. Edgar S. Thomson, New York, read a paper on "Sympathetic Optic Neuritis, with Report of a Case." Discussed by Drs. R. L. Randolph, Baltimore; E. E. Holt, Portland, Me.; Mr. James W. Barrett, Melbourne, Australia; Drs. F. H. Verhoeff, Boston; M. H. Post, St. Louis; S. D. Risley, Philadelphia; Samuel Theobald, Baltimore; Joseph S. Lichtenberg, Kansas City, Mo.; Adolf Alt, St. Louis, and E. S. Thomson, New York.

Dr. H. D. Bruns, New Orleans, read a paper on "Phlyctenular Ophthalmia and Its Etiology." Discussed by Drs. Richard J. Tivnen, Chicago; Arthur G. Bennett, Buffalo; Samuel Theobald, Baltimore; F. H. Verhoeff, Boston; Hiram Woods, Baltimore; Mr. James W. Barrett, Melbourne, Australia; Drs. George S. Derby, Boston; J. A. Donovan, Butte, Mont., and H. D. Bruns, New Orleans.

Dr. Walter E. Lambert, New York, read a paper on "Removal of the Lens in High Myopia." Discussed by Drs. Peter A. Callan, New York; S. D. Risley, Philadelphia; H. D. Bruns, New Orleans; Linn Emerson, Orange, N. J.; William H. Bates, New York; Francis Valk, New York, and W. E. Lambert, New York.

WEDNESDAY, JUNE 5—AFTERNOON

Dr. William Campbell Posey, Philadelphia, read a paper on "Orbital Cellulitis from Disease of the Superior Maxilla in Children." Discussed by Drs. F. R. Packard and W. C. Posey, Philadelphia.

Dr. F. H. Verhoeff, Boston, read a paper on "Sclerosis of the Ligamentum Pectinatum and Its Relation to Glaucoma; with Lantern Demonstration." Discussed by Drs. M. Feingold, New Orleans; Walter B. Weidler, New York, and F. H. Verhoeff, Boston.

Dr. Casey A. Wood, Chicago, read a paper on "Nasal Hydrorrhea; Its Relations to Lesions of the Brain and Visual Apparatus." Discussed by Drs. Lucien Howe, Buffalo; Oscar Wilkinson, Washington, D. C., and Casey A. Wood, Chicago.

Dr. Albert E. Bulson, Jr., Fort Wayne, Ind., read a paper on "Some Early Diagnostic Retinal Signs of Arteriosclerosis and Chronic Bright's Disease." Discussed by Drs. F. T. Rogers, Providence; S. D. Risley, Philadelphia; Otto Landman, Toledo, O.; Allen Greenwood, Boston; Wendell Reber, Philadelphia, and A. E. Bulson, Jr., Fort Wayne, Ind.

Dr. William Zentmayer, Philadelphia, read a paper on "Visual Disturbances from Distant Hemorrhage." Discussed by Hiram Woods, Baltimore; E. C. Ellett, Memphis; Samuel Theobald, Baltimore; William M. Sweet, Philadelphia; Adolf Alt, St. Louis, and William Zentmayer, Philadelphia.

WEDNESDAY, JUNE 5—EVENING

Dr. Edward Jackson, Denver, delivered an address: "Provision for the Proper Teaching of Ophthalmology in Medical Schools." Discussed by Drs. S. D. Risley, Philadelphia; F. C. Todd, Minneapolis; T. Chalmers Fulton, Philadelphia, and E. Jackson, Denver.

THURSDAY, JUNE 6—MORNING

Dr. Charles H. Beard, Chicago, presented an instrument in the form of a trephine for performing sclerotomy in glaucoma. It consisted of two members, an outer sleeve, with the cutting edge on one end, and a central shaft with a very fine screw on the end for fixing the instrument so that it would not move when the cutting was begun, and also for prevention of the loss of the button into the anterior chamber.

Dr. Wendell Reber, Philadelphia, presented an instrument for the control of the cornea and the prevention of vitreous prolapse in operations on the eye. It is an improvement of the disk presented by Dr. Reber two years ago. It consists of a beveled rim of metal which fits over the cornea and is controlled by an attached handle. It may be used also during the insertion of the Ellett corneal stitch. Since using it Dr. Reber has had only 2.5 per cent. of vitreous prolapses in ninety cases.

Dr. Edward C. Ellett, Memphis, read a paper on "Cataract Extraction with Corneal Suture." Discussed by Drs. Mark D. Stevenson, Akron, O.; C. H. Williams, Boston; M. H. Post, St. Louis; William H. Bates, New York, and E. C. Ellett, Memphis.

The Section then went into executive session.

Dr. W. C. Posey, Philadelphia, Chairman of the Executive Committee, announced that the following officers had been elected for 1913: Chairman, Dr. Hiram Woods, Baltimore; Vice-Chairman, Dr. E. S. Thomson, New York; Secretary, Dr. George S. Derby, Boston; Delegate, Dr. Thomas A. Woodruff, Chicago.

On motion the report of the Committee on Nominations was adopted.

Dr. A. E. Bulson, Jr., Fort Wayne, stated that the Knapp Testimonial Fund at present amounted to something like $925. A copy of the Knapp Testimonial Fund medal was exhibited, and it was explained that the medal need not necessarily be given every year, but only for meritorious work in ophthalmology by some member of the Section. Dr. Bulson moved the creation of a committee of three members of the Section not on the program to read and consider the papers offered at this session to determine their merit with a view to awarding the Knapp medal. The names of eleven members of the Section were proposed and a vote was taken by ballot, resulting in the selection for this committee of Drs. S. D. Risley, Philadelphia; Peter A. Callan, New York, and John E. Weeks, New York.

Dr. Bulson explained that an arrangement had been made with Dr. Edward Jackson, editor of the Year-Book, by which if a sufficient number could be guaranteed, the Year-Book would be furnished to contributors of $5 or over to the Knapp Testimonial Fund, and a bound copy of the Transactions of the Section would also be supplied to such contributors without additional charge. He recommended that this arrangement be approved by the Section.

On motion the report of Dr. Bulson for the Committee on the Knapp Testimonial Fund and its recommendations were accepted.

On motion of Dr. G. C. Savage, Nashville, the Committee on the Knapp Testimonial Fund, consisting of Drs. W. C. Posey, Philadelphia, and Albert E. Bulson, Jr., Fort Wayne, Ind., was continued during life or good behavior.

Dr. W. C. Posey, Chairman of the Committee on Pilots, made a report, which was published in THE JOURNAL, June 8, p. 1809.

On motion the report was adopted, to be printed in the Transactions of the Section, and the committee was continued.

The report of the Committee on Optometry was read by the Secretary, and was as follows:

In 1909 the Section on Ophthalmology of the American Medical Association appointed Drs. James Thorington of Philadelphia and J. C. Bossidy of Boston a committee on optometry.

Since that date the committee has endeavored to be of assistance to the medical profession in the various states in which the question of the legal recognition of opticians has been fought.

Inasmuch as the Bulletin of the American Medical Association of Sept. 15, 1911, contains the result of their labors and can be secured when needed by the medical profession, the committee feels that its existence is no longer necessary, and hereby tenders its resignation to the Section.

JOHN C. BOSSIDY,
JAMES THORINGTON,
Committee.

On motion the report was accepted and the committee discharged.

Dr. Lucien Howe, Chairman, read the report of the Committee on the Ocular Muscles.

On motion the report was received and the committee continued.

Dr. F. Park Lewis, Chairman, read the report of the Committee on the Conservation of Vision, which was published in THE JOURNAL, June 8, p. 1805.

On motion the report was adopted and the committee continued.

Dr. Percy Fridenberg, New York, exhibited a new capsulotomy knife and read his paper on "Preparatory Capsulotomy in Extraction of Immature Senile Cataract." Discussed by Drs. Homer E. Smith, Norwich, N. Y.; Howard F. Hansell, Philadelphia; G. C. Savage, Nashville; S. Lewis Ziegler, Philadelphia, and Henry DeWitt Watson, Binghamton, N. Y.

Dr. Samuel Theobald, Baltimore, read a paper on "Suggestions Regarding Some Points in the Technic of Cataract Extraction." No discussion.

Dr. D. W. Greene and J. W. Millette, Dayton, O., read a paper on "Visual Results After the Smith Intracapsular Cataract Operation." Discussed by Drs. D. W. Greene, Dayton, O.; W. R. Parker, Detroit; J. W. Millette, Dayton, O.; Harris G. Sherman, Cleveland, O., and Hiram Woods, Baltimore.

Dr. F. Phinizy Calhoun, Atlanta, Ga., read a paper on "Eye Complications Caused by Hookworm Disease, with Special Reference to the Formation of Cataracts." Discussed by Dr. Howard F. Hansell, Philadelphia.

THURSDAY, JUNE 6—AFTERNOON

Dr. Charles H. Beard, Chicago, presented an eye cup for applying solutions of sodium iodid and calcium chlorid to the eye for clearing up incipient cataract. The solution consists of 5 gm. of each salt and 100 c.c. of water.

Dr. Lucien Howe, Buffalo, read a paper on "Measurement of Fatigue of the Ocular Muscles." Discussed by Drs. C. H. Williams, Boston; G. C. Savage, Nashville; Wendell Reber, Philadelphia, and Lucien Howe, Buffalo.

Dr. Wendell Reber, Philadelphia, read a paper on "The Findings of the Tropometer in 100 Normal Eyes; Its Value

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in the Study of Strabismus." Discussed by Drs. Edward Lauder, Cleveland; Francis Valk, New York; A. Duane, New York; G. C. Savage, Nashville, and W. Reber, Philadelphia.

Dr. Alexander Duane, New York, read a paper on "Normal Values of the Accommodation at All Ages: A Statistical Study." Discussed by Drs. S. D. Risley, Philadelphia, and E. E. Holt, Portland, Me.

Dr. John A. Donovan, Butte, Mont., read a paper on "Dangers to and Requirements of the Eyes of the National Marksman." Discussed by Major Paul Stacy Halloran, U. S. Army; Drs. Arthur G. Bennett, Buffalo; W. C. Posey, Philadelphia; Alexander Duane, New York; S. D. Risley, Philadelphia, and John A. Donovan, Butte, Mont.

Dr. John C. Bossidy, Boston, read a paper on "Case of Uniocular Polyopia Existing in Both Eyes." Discussed by Dr. A. E. Davis, New York.

Dr. Burton Chance, Philadelphia, read a paper on "Morgagnian Cataract." Discussed by Drs. E. B. Heckel, Pittsburgh; Lucien Howe, Buffalo; C. A. Clapp, Baltimore; G. C. Savage, Nashville, and B. Chance, Philadelphia.

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## SECTION ON LARYNGOLOGY, OTOLOGY AND RHINOLOGY

### TUESDAY, JUNE 4—AFTERNOON

The meeting was called to order at 2 p. m. by the Chairman, Dr. George E. Shambaugh, Chicago.

Dr. Shambaugh read the Chairman's address on "The Specialist in Medicine."

Dr. Chevalier Jackson, Pittsburgh, read a paper on "Bronchoscopic Dilatation of Bronchial Stenoses." Discussed by Dr. Emil Mayer, New York.

Dr. Ross H. Skillern, Philadelphia, read a paper on "Exploratory Needle Puncture of the Maxillary Antrum in 100 Individuals Demonstrating the Marked Dissimilarity Between the Clinical and Post-Mortem Findings." Discussed by Drs. Justus Matthews, Rochester, Minn.; L. W. Dean, Iowa City; Hanau Loeb, St. Louis; Ross H. Skillern, Philadelphia, and W. L. Ballenger, Chicago.

Dr. F. C. Todd, Minneapolis, read a paper on "Ethmoiditis a Common Sequel of Hay Fever." Discussed by Drs. H. O. Reik, Baltimore; G. W. Richards, Fall River, Mass.; W. L. Ballenger, Chicago; Hanau Loeb, St. Louis; C. F. Welty, San Francisco; F. V. Laurent, Pittsburgh; Otto Freer, Chicago; P. M. Hickey, Detroit; J. F. Klinedinst, York, Pa.; G. F. Cott, Buffalo, N. Y.; Emil Mayer, New York; H. F. Pyfer, Norristown, Pa.; W. E. Sauer, St. Louis, and F. C. Todd, Minneapolis.

Dr. P. M. Hickey, Detroit, read a paper on "The Roentgen Ray in Otolaryngology." Discussed by Drs. Sidney Lange, Cincinnati; C. F. Welty, San Francisco; W. W. Carter, New York; J. E. Logan, Kansas City, Mo.; Wendell Phillips, New York; Otto Glogau, New York; Max Goldstein, St. Louis; G. F. Cott, Buffalo; B. R. Shurly, Detroit, and P. M. Hickey, Detroit.

### WEDNESDAY, JUNE 5—MORNING

The following papers were read as a Symposium on Intracranial Complications.

Dr. Max Goldstein, St. Louis: "Diseases of the Ear which Lead to Brain Abscess."

Dr. James F. McKernan, New York: "Operative Technic for the Relief of Brain Abscess of Otitic Origin."

Dr. F. X. Dercum, Philadelphia: "Diagnosis and Localization of Brain Abscess."

The three papers of this symposium were discussed by Drs. John H. Gibbon, Philadelphia; G. F. Cott, Buffalo, N. Y.; C. F. Welty, San Francisco; Seth MacCuen Smith, Philadelphia; W. P. Eagleton, Newark, N. J.; C. R. C. Borden, Boston; Lee M. Hurd, New York; G. W. MacKenzie, Philadelphia; E. L. Bull, Jersey City; Andrew Timberman, Columbus, O.; Herman Jerecky, New York; W. A. Potter, Detroit; J. A. Stucky, Lexington, Ky.; M. M. Cullum, Nashville, Tenn.; Thomas Hubbard, Toledo; W. L. Ballenger, Chicago; C. M. Miller, Richmond; Max Goldstein, St. Louis; James F. McKernan, New York, and F. X. Dercum, Philadelphia.

The Section offered a vote of thanks to Dr. Dercum for his masterful presentation of the subject from the standpoint of the neurologist.

### WEDNESDAY, JUNE 5—AFTERNOON

Instruments were presented by the following:

Dr. Lee M. Hurd, New York: Tonsil-pillar retractor and dissector, tonsil-grasping forceps, tonsillar hemostatic clamp and curet for going through the cartilage in submucous septal resection.

Dr. H. W. Loeb, St. Louis, for Dr. W. E. Sauer, St. Louis: Modification of the Sluder instrument for removal of tonsils.

Dr. George L. Richards, Fall River, Mass.: Cutting forceps for ethmoidal operations, in which the cutting blade works from behind forward instead of from before backward, as in the usual instruments of this kind.

Dr. J. A. Pratt, Aurora, Ill.: New instrument for direct laryngoscopy in which the illumination is furnished by a battery in the handle of the instrument.

Dr. John J. Sullivan, Jr., Scranton, Pa.: Set of instruments for entering the frontal sinus intranasally—frontal sinus rasps.

Dr. W. L. Ballenger, Chicago; Modification of the Sluder tonsil instrument.

Dr. C. R. C. Borden, Boston, read a paper on the "Use of Salvarsan in Lesions of the Nose, Throat and Ear." Discussed by Drs. George P. Sanborn, Boston; W. Freudenthal, New York; Joseph H. Abraham, New York; G. L. Richards, Fall River, Mass.; Dunbar Roy, Atlanta, Ga.; Emil Mayer, New York, and C. R. C. Borden, Boston.

Dr. Justus Matthews, Rochester, Minn., read a paper on "Relation of Nasal Conditions to Asthma."

Dr. Wolff Freudenthal, New York, read a paper on "Further Experience with Endobronchial Therapy of Asthma."

These two papers were discussed by Drs. E. R. Lewis, Dubuque, Ia.; G. F. Cott, Buffalo, N. Y.; D. J. McDonald, New York; Wolff Freudenthal, New York, and Justus Matthews, Rochester, Minn.

Dr. Homer Dupuy, New Orleans, read a paper on "Treatment of Chronic Laryngeal Stenosis by Prolonged Intubation."

Discussed by Drs. H. L. Lynah, New York; B. R. Shurly, Detroit; E. Mayer, New York, and H. Dupuy, New Orleans.

### THURSDAY, JUNE 6—MORNING

Election of Officers:

The Executive Committee reported the following nominations: Chairman, Dr. Robert Levy, Denver; Vice Chairman, Dr. Norton L. Wilson, Elizabeth, N. J.; Secretary, Dr. Burt R. Shurly, Detroit; Delegate, Dr. Chevalier Jackson, Pittsburgh, and Alternate, Dr. J. F. Barnhill, Indianapolis.

On motion, the Secretary was instructed to cast the ballot for the nominees recommended by the Executive Committee, which was accordingly done.

On motion, the Chairman was requested to act as a delegate from the Section to confer with delegates or committees from other special societies, with reference to the establishment of a special journal.

Dr. Charles Richardson, Washington, D. C., offered a resolution which was adopted requesting the House of Delegates to urge the Pure Food Commission of the United States to have all products of caustic soda and potash sold in the shops with proper poison labels. [There is no record in the House minutes of any action on this.]

Dr. M. M. Cullom, Nashville, Tenn., read a paper on "Refinements Which Render Tonsillectomy Safe, Surgical and Satisfactory."

Dr. Lee M. Hurd, New York, read a paper on "Indications and Contra-Indications in Tonsillectomy."

These two papers were discussed by Drs. T. Chew Worthington, Baltimore; J. T. Gwathmey, New York; Homer DuPuy, New Orleans; G. L. Richards, Fall River, Mass.; F. V. Laurent, Pittsburgh; B. D. Sheedy, New York; J. H. Abraham, New York; Hanau Loeb, St. Louis; W. L. Ballenger, Chicago; F. P. Emerson, Boston; C. F. Welty, San Francisco; W. W. Carter, New York; H. B. Lemere, Omaha; H. P. Pyfer, Norristown, Pa.; G. F. Cott, Buffalo; G. W. MacKenzie, Philadelphia; D. B. McDonald, New York; Ard, (?), Zanesville, Ohio; B. R. Shurly, Detroit; M. M. Cullom, Nashville, Tenn., and Lee M. Hurd, New York.

The following papers were read as a Symposium on Correction of Deformities of the Nasal Septum.

Dr. Otto T. Freer, Chicago: "The Submucous Resection of the Nasal Septum—The Author's Present Perfected Method."

Dr. Charles W. Richardson, Washington, D. C.: "Methods of Correcting Deflections of the Nasal Septum."

Dr. H. W. Loeb, St. Louis: "Indications and Contra-Indications to Resection of the Nasal Septum."

The three papers of this symposium were discussed by Drs. W. L. Ballenger, Chicago; B. D. Sheedy, New York; C. F. Welty, San Francisco; W. W. Carter, New York; Ostram, (?); G. L. Richards, Fall River, Mass.; G. C. Kneedler, Pittsburgh; Otto T. Freer, Chicago; C. W. Richardson, Washington, D. C., and H. W. Loeb, St. Louis.

THURSDAY, JUNE 6—AFTERNOON

Dr. E. R. Lewis, Dubuque, Ia., read a paper on "A Study of Cellular Change During and After Acute Mastoiditis." Discussed by Drs. Norval H. Pierce, Chicago; Calvin R. Elwood, Menominee, Mich.; C. F. Welty, San Francisco; G. F. Cott, Buffalo; S. Oppenheimer, New York; T. R. Chambers, Jersey City; B. A. Randall, Philadelphia, and E. R. Lewis, Dubuque, Iowa.

The following papers were read as a Symposium on the Surgery of the Labyrinth:

Dr. R. B. Canfield, Ann Arbor: "Diffuse Suppuration of the Labyrinth and the Indication for Operative Interference."

Dr. John D. Richards, New York: "Technic of Radical Labyrinth Surgery."

Dr. Norval H. Pierce, Chicago: "A Plea for Conservative Labyrinth Surgery."

The papers of this symposium were discussed by Drs. G. W. MacKenzie, Philadelphia; C. F. Welty, San Francisco; Otto Glogau, New York; W. L. Ballenger, Chicago; G. E. Shambaugh, Chicago; C. E. Potter, Detroit; B. A. Randall, Philadelphia; R. B. Canfield, Ann Arbor; John D. Richards, New York, and Norval H. Pierce, Chicago.

## SECTION ON PHARMACOLOGY AND THERAPEUTICS

TUESDAY, JUNE 4—MORNING

The Chairman, Dr. Torald Sollmann, Cleveland, called the meeting to order in the chapel of the First Presbyterian Church at 2:15 p. m.

Dr. Sollmann then read the Chairman's address.

Dr. Joseph P. Remington, Philadelphia, presented the Address of the Delegation from the American Pharmaceutical Association as follows:

The American Pharmaceutical Association tenders its cordial greetings to the American Medical Association and to its Section on Pharmacology and Therapeutics. The association which our delegation represents was founded in 1852 and the two associations were organized a few years apart. Our association was founded mainly for the purpose of preventing the adulteration in drugs and it sprang into existence because of the great need of protecting the public from imported, adulterated drugs. While this was the essential object, as time wore on other important interests soon developed, but it is a significant fact that the first article in the constitution of the American Pharmaceutical Association remains as follows:

Its aim shall be to unite the educated and reputable pharmacists and druggists of America in the following objects:

1. To improve and regulate the drug market by preventing the importation of inferior, adulterated or deteriorated drugs by detecting and exposing home adulterations.

The significance of these facts is emphasized by the present condition of this nation with regard to adulteration, sophistication, and misbranding of medicinal substances and also that the American Medical Association is doing yeoman service in protecting the sick and helpless from the evils which have for so long baffled the efforts of the physician and pharmacist. THE JOURNAL of your Association has been waging a successful warfare against great odds in the same direction.

Our pharmacists and physicians have been entirely too lax for centuries in demanding the purest and best drugs in combating disease. Silently, with the utmost secrecy, an army has been at work cheapening and debasing the quality of medicines until the "very elect" have been deceived, but there has been another army to whom as yet but little credit has been given publicly who have been at work openly and persistently, studying analytical chemistry. The reactions which take place between chemical substances have formed the basis for producing reagents, test solutions, indicators, and other agents which now enable the chemist to make accurate analyses of secret remedies and to detect adulterations and impurities, and it has been possible, through the Food and Drugs Acts, to reveal many of the secrets which won ill-gotten wealth for the owner.

Publicity and education have gone hand in hand and the apathy and indifference of the public, as well as professional men, have been succeeded by amazement and finally consternation when the extent of these great frauds has been revealed; but the end is not yet. While much has been accomplished, there must be no wavering; the snake has only been scotched and as long as the powers of evil continue to exist, there will always be that secret, slimy army continually at work. This Section of Pharmacology and Therapeutics embraces in its membership many of those who have enlisted in the opposing ranks.

The American Pharmaceutical Association tenders to its sister body, the American Medical Association, its congratulations for the work which has already been accomplished and with the two national associations joined together, there will come that union from which strength is evolved. May we not hope that a sufficient number of workers will be found marching together, shoulder to shoulder, both facing the common enemy.

JOS. P. REMINGTON, Chairman. G. M. BERINGER.
H. M. WHELPLEY. OTTO RAUBENHEIMER.
J. H. BEAL. THEODORE J. BRADLEY.
I. V. S. STANILAUS. GEORGE E. NORTON.
L. F. KEBLER. H. H. RUSBY.

Delegates.

A motion was made and carried to extend the privileges of the floor to the members of the Delegation from the American Pharmaceutical Association.

The following papers were read as a Symposium on Patents and Trade-Marks:

Mr. M. I. Wilbert, Washington, D. C.: "Report of the Committee of the American Medical Association on the Present Status of the Laws."

Dr. F. E. Stewart, Philadelphia: "The Relation of the Patent and Trade-Mark Laws to Materia Medica Nomenclature."

The two papers of this symposium were discussed by Mr. A. V. Morgenstern, New York; Drs. S. Solis Cohen, Philadelphia; Torald Sollmann, Cleveland; B. Fantus, Chicago; Oliver T. Osborne, New Haven, Conn.; H. C. Wood, Jr., Philadelphia; and Messrs. M. I. Wilbert, Washington, D. C.; H. P. Hynson, Baltimore, and W. A. Puckner, Chicago.

A motion was made by Dr. B. Fantus, Chicago, which after discussion, was passed in the following form:

That the Chairman appoint a committee of three to draw up resolutions to be presented by the representative of the Section on Pharmacology and Therapeutics to the House of Delegates, to attempt to secure legislation forbidding patents of materia medica articles and permitting patents only of process of manufacture and to request the manufacturers to act in cooperation with the Association in this necessary legislation.

Dr. Torald Sollmann, Chairman, appointed the following committee to draw up the above resolutions: Drs. Oliver T. Osborne, New Haven, Conn.; F. E. Stewart, Philadelphia; B. Fantus, Chicago.

Dr. George Barclay Wallace, New York, read a paper on "The Influence of Pathologic Conditions on Drug Action." Discussed by Drs. S. Solis Cohen, Philadelphia; O. T. Osborne, New Haven, Conn.; E. Lefevre, New York; H. C. Wood, Jr., Philadelphia; Joseph L. Miller, Chicago; W. Salant, Washington, D. C., and Thomas F. Reilly, New York.

Dr. Joseph L. Miller, Chicago, read a paper entitled "How Can the Science of Therapeutics Be Furthered?" Discussed by Drs. F. E. Stewart, Philadelphia; George D. Kahlo, French Lick Springs, Ind.; John P. Sawyer, Cleveland, O.; S. Solis Cohen, Philadelphia, and W. B. Snow, New York.

Dr. Bernard Fantus, Chicago, read a paper on "Candy Medication." Discussed by Drs. C. L. Graber, Cleveland; F. E. Stewart, Philadelphia; Thomas F. Reilly, New York, and B. Fantus, Chicago.

A motion was made by Dr. S. Solis Cohen, Philadelphia, and carried, that a copy of the paper by Dr. Fantus on Candy Medication be sent to the Committee on Revision of the

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United States Pharmacopeia from the Section on Pharmacology and Therapeutics.

Dr. William L. Clark, Philadelphia, read a paper on "The Uses of High-Frequency Desiccation, Fulguration and Thermoradiotherapy in Therapeutics." Discussed by Drs. G. E. Pfahler, Philadelphia; W. B. Snow, New York; W. H. Schmidt, Atlantic City, N. J.; C. L. Graber, Cleveland, O., and W. L. Clark, Philadelphia.

WEDNESDAY, JUNE 5—MORNING

The following papers were read as a Symposium on Roentgen Therapy:

Dr. Clarence E. Skinner, New Haven, Conn., read a paper on "Practical Application of the Roentgen-Ray to the Management of Malignant Growths." Discussed by Drs. George E. Pfahler, Philadelphia; R. W. Fry, Trenton, Ky.; W. B. Snow, New York; Edward Halman Skinner, Kansas City, Mo.; Alfred L. Gray, Richmond, Va.; Byron C. Darling, New York; R. H. Boggs, Pittsburgh, Pa., and Dr. Skinner, New Haven, Conn.

Dr. Russell H. Boggs, Pittsburgh, read a paper on "Roentgen Treatment of Non-Malignant Diseases." Discussed by Drs. Henry K. Pancoast, Philadelphia; Herbert F. Pitcher, Haverhill, Mass.; Sidney Lange, Cincinnati; Alfred L. Gray, Richmond, Va.; Oliver T. Osborne, New Haven, Conn.; G. E. Pfahler, Philadelphia, and Russell H. Boggs, Pittsburgh.

The following papers were read as a Symposium on the Desirability of a More Restricted Materia Medica from Various Points of View.

Prof. W. A. Puckner, Chicago: "The Unreliability of Unimportant Medicaments" (read by Mr. M. I. Wilbert, Washington, D. C.).

Prof. Henry P. Hynson, Baltimore: "The Pharmacist."

Dr. E. Lefevre, New York: "Medical Instruction," (read by Dr. George B. Wallace, New York.)

Dr. Oliver T. Osborne, New Haven, Conn.: "The Medical Practitioner (The Drugs We Need)."

Mr. M. I. Wilbert, Washington, D. C.: "Report of the Committee on Useful Remedies of the American Medical Association."

The five papers of this symposium were discussed by Drs. F. E. Stewart, Philadelphia; W. D. Calvin, Ft. Wayne, Ind.; H. A. Hare, Philadelphia; Mr. A. V. Morgenstern, New York; Drs. S. Solis Cohen, Philadelphia; M. Clayton Thrush, Philadelphia; L. F. Kebler, Washington, D. C., and Oliver T. Osborne, New Haven, Conn.

WEDNESDAY, JUNE 5—AFTERNOON

Dr. Robert N. Willson, Philadelphia, read a paper on "Problems of Venereal Diseases." Discussed by Drs. K. E. Ledbetter, Washington, D. C.; Guy L. Kiefer, Detroit; George M. Sternberg, Washington, D. C.; Sarah J. McNutt, New York; A. Howe, New York; John F. Anderson, Washington, D. C.; H. D. Pease, New York; Elnora C. Folkman, Washington, D. C., and R. N. Willson, Philadelphia.

The following papers were read as a Symposium on Antiseptics and Germicides, at a joint meeting with the Section on Preventive Medicine and Public Health, held in the Olivet Presbyterian Church:

Dr. Norman M. Harris, Chicago: "Intestinal Antiseptics." Discussed by Drs. George M. Sternberg, Washington, D. C.; H. C. Wood, Jr., Philadelphia; J. H. M. Knox, Baltimore, Md., and N. M. Harris, Chicago.

Dr. John F. Anderson, Washington, D. C.: "The Phenol Coefficient of Certain Disinfectants." Discussed by Drs. J. T. Ainslee Walker, London, England; Tilly, (?) Washington, D. C.; W. F. Snow, Sacramento, Cal.; H. D. Pease, New York; B. J. Dryfuss, New York; E. M. Houghton, Detroit, and John F. Anderson, Washington, D. C.

Drs. Samuel Amberg and J. H. Mason Knox, Jr., Baltimore: "The Influence of Sodium Iodoxybenzoate on Reactions of Inflammatory Character." No discussion.

Dr. J. A. Capps, Chicago: "Effect of Iodids on the Circulation and Blood-Vessels." Discussed by Drs. B. Fantus, Chicago, and J. A. Capps, Chicago.

Dr. H. G. Beck, Baltimore: "The Duodenal Medication of Ipecac in the Treatment of Amebic Dysentery." No discussion.

THURSDAY, JUNE 6—MORNING

The following officers were elected: Chairman, Dr. R. L. Wilbur, San Francisco; Vice Chairman, Dr. J. F. Anderson, Washington, D. C.; Secretary, Mr. M. I. Wilbert, Washington, D. C.; Delegate, Dr. Torald Sollmann, Cleveland, and Alternate, Dr. Reid Hunt, Washington, D. C., thus making the Executive Committee consist of Drs. David L. Edsall, Boston; Lawrence Litchfield, Pittsburgh, and Torald Sollmann, Cleveland.

Dr. Robert A. Hatcher, New York, read a paper on "The Persistence of Action of the Digitalis Bodies."

Dr. Carey Eggleston, New York, read a paper on "Clinical Observations on the Duration of Digitalis Action."

These two papers were discussed by Drs. David Marvin, Burlington, Vt.; L. F. Bishop, New York; R. L. Wilbur, San Francisco; Arthur D. Hirschfelder, Baltimore; E. W. Tully, Philadelphia; Reid Hunt, Washington, D. C.; William Salant, Washington, D. C.; Henry Beates, Philadelphia; Mr. Otto Raubenheimer, Brooklyn; Drs. R. A. Hatcher and Carey Eggleston, New York.

The following papers were read as a Symposium on Drug Standards:

Prof. Joseph P. Remington, Philadelphia: "Report on Progress of the United States Pharmacopeia Revision." No discussion.

Dr. L. F. Kebler, Washington, D. C.: "The Quality of Drugs on the Market."

Prof. R. H. True, Washington, D. C.: "Drug Plant Cultivation."

These two papers were discussed by Prof. Joseph P. Remington, Philadelphia; Dr. C. B. Lowe, Philadelphia; Mr. Otto Raubenheimer, Brooklyn.

Dr. H. C. Wood, Jr., Philadelphia, read a paper on "The Ideals and Limitations of Bio-Assay." Discussed by Mr. Vandarkleed, Philadelphia.

Prof. Henry Kraemer, Philadelphia, read a paper on "The Retail Pharmacist as a Purveyor of Pure Drugs."

Dr. Julius H. Comroe, York, Pa., read a paper on "Prescribing Versus Dispensing."

Dr. M. Clayton Thrush, Philadelphia, read a paper on "An Investigation of Certain Galenical Preparations of the Pharmacopeia of the United States with Special Reference to Their Stability."

These three papers were discussed by Drs. Henry Beates, Philadelphia; F. E. Stewart, Philadelphia, and Mr. Otto Raubenheimer, Brooklyn.

THURSDAY, JUNE 6—AFTERNOON

The following papers were read as a Symposium on Anesthesia in a joint meeting with the Section on Pathology and Physiology:

Dr. Charles Baskerville, New York: "Chemistry of Anesthetics."

Dr. Greeman Allen, Boston: "Spinal Anesthesia."

Dr. James T. Gwathmey, New York: "American Statistics."

Dr. A. H. Miller, Providence, R. I.: "Postoperative Mortality from Anesthetics; the Recorded Death-Rate from Ethyl Chlorid."

Dr. Joseph E. Lumbard, New York: "Practical Helps in Surgical Anesthesia."

Dr. Charles K. Teter, Cleveland: "Principles Involved in the Scientific Administration of Nitrous Oxid with Oxygen, and the Limitations of Nitrous Oxid with Oxygen as a General Anesthetic."

Dr. W. S. Bainbridge, New York: "Spinal Anesthesia."

The seven papers of this symposium were discussed by Drs. F. J. Cotton, Boston; Yandell Henderson, New Haven, Conn.; Wayne Babcock, Philadelphia; R. C. Coburn, New York; Robert H. Ferguson, East Orange, N. J.; T. B. Buchanan, New York; A. F. Erdmann, Brooklyn; F. R. Widdowson, Philadelphia; F. W. Pinneo, Newark, N. J.; F. K. Ream, Chicago; J. W. Heim, Louisville, Ky.; J. F. Anderson, Washington, D. C.; W. S. Bainbridge, New York; C. K. Teter, Cleveland, O.; J. T. Gwathmey, New York, and Charles Baskerville, New York.

## SECTION ON PATHOLOGY AND PHYSIOLOGY

### TUESDAY, JUNE 4—AFTERNOON

The meeting was called to order by the Chairman, Dr. Leo Loeb, St. Louis, at 2 p. m.

Dr. Loeb appointed Drs. E. C. Rosenow, of Chicago; Rufus Cole, New York, and John F. Anderson, Washington, as members of the Nominating Committee, to present nominations of officers. He then stated that the following nominations had been made for associate membership in the Association: A. P. Lyon, St. Louis; Walter Garry, St. Louis; Meyer S. Fleisher, St. Louis; Paul Lewis, Philadelphia; A. S. Warthin, Ann Arbor, Mich.; D. Rivas, Philadelphia; R. A. Lambert, New York; George W. Smith, St. Louis; Harvey R. Gaylord, Buffalo; Hans Finssen, Palo Alto, Cal.; Frederick Gay, Berkeley, Cal. It was moved and seconded that these names be transmitted to the House of Delegates for action. Carried.

Dr. Leo Loeb, St. Louis, read the Chairman's address. No discussion.

The following papers were read as a Symposium on Recent Advances in Our Knowledge of the Acute Infections:

Dr. Rufus Cole, New York: "The Nature of Pneumococcus Infection and Immunity." Discussed by Drs. S. J. Meltzer, New York; F. C. Vaughan, Ballimora Mountain, N. Y.; W. D. Robinson, New York; E. C. Rosenow, Chicago; O. O. Hirschfelder, Ballimora Mountain, N. Y., and Rufus Cole, New York.

Dr. Karl K. Koessler, Chicago: "Recent Advances in Our Knowledge of Scarlet Fever." No discussion.

Dr. A. Sophian, New York: "Blood-Pressure Observations in Epidemic Meningitis; Use of Blood-Pressure in Controlling the Administration of Serum." Discussed by Drs. O. O. Hirschfelder, Ballimora Mountain, N. Y.; William Litterer, Nashville, Tenn.; Isaac Levin, New York; L. B. Wilson, Rochester, Minn., and A. Sophian, New York.

Drs. John F. Anderson and Joseph Goldberger, Washington, D. C.: "Recent Advances in Our Knowledge of Measles." No discussion.

Drs. Joseph Goldberger and John F. Anderson, Washington, D. C.: "Some Recent Advances in Our Knowledge of Typhus Fever." Discussed by Drs. G. A. Friedman, New York; (?) Vaughan; Leo Loeb, St. Louis; W. Litterer, Nashville, Tenn., and Joseph Goldberger, Washington, D. C.

### WEDNESDAY, JUNE 5—MORNING

Dr. Lewis B. Bates, Canal Zone, read a paper on "The Wassermann Test in the Tropics (Canal Zone—Panama)." Discussed by Drs. William Krauss, Memphis; Jane L. Berry, New York, and Lewis B. Bates, Canal Zone.

Dr. Peyton Rous, New York, read a paper on "Demonstration of a Sarcoma Transmitted by a Filterable Agent." Discussed by Drs. Isaac Levin, New York; H. W. Abelmann, Chicago, and Peyton Rous, New York.

Dr. J. W. Vaughan, Detroit, read a paper on "Blood-Changes Caused by the Hypodermic Administration of the Cancer Proteid." Discussed by Drs. J. W. McConnell, Philadelphia; L. J. Hirschmann, Detroit; G. E. McCaskey, Fort Wayne, Ind.; Isaac Levin, New York, and J. W. Vaughan, Detroit.

Dr. Isaac Levin, New York, read a paper on "Immunity and Specific Therapy in Experimental Cancer." Discussed by Drs. William Salant, Washington; J. W. McConnell, Philadelphia; V. S. Vaughan, Detroit; J. W. Vaughan, Detroit; Leo Loeb, St. Louis, and Isaac Levin, New York.

Dr. A. L. Skoog, Kansas City, Mo., read a paper on "Acute Poliomyelitis, Transverse Myelitis Type." No discussion.

Dr. Leonard W. Ely, Denver, read a paper on "The Pathology and Classification of Chronic Joint Disease." Discussed by Dr. William Stotesbury Githens, New York.

### WEDNESDAY, JUNE 5—AFTERNOON

The following papers were read in a Symposium on Mercury and Salvarsan in the Treatment of Syphilis at a joint meeting with the Section on Dermatology and the Scientific Exhibit:

Drs. Homer F. Swift and Arthur W. M. Ellis, New York: "A Study of Antibody Formation in Syphilis."

Dr. J. A. Fordyce, New York: "The Administration of Salvarsan in Syphilis."

Dr. Abner Post, Boston: "The Proper Place of Mercury and of Salvarsan in the Treatment of Syphilis."

Dr. Hideyo Noguchi, New York: "Differentiation of the *Spirochæta pallida* and Other Allied Forms of Spirochetes in Culture."

Dr. Howard Fox, New York: "The Relative Value of Mercury and Salvarsan from a Sociologic Point of View."

The five papers of this symposium were discussed by Drs. W. Allen Pusey, Chicago; A. G. Rytina, Baltimore; E. G. Ballinger, Atlanta, Ga.; Judson Daland, Philadelphia; Richard L. Sutton, New York; B. C. Corbus, Chicago; H. J. Nichols, Washington, D. C.; W. L. Ravitch, Louisville, Ky.; H. Noguchi, H. F. Swift, and J. A. Fordyce, New York.

### THURSDAY, JUNE 6—MORNING

The Chairman of the Nominating Committee reported the following nominations of officers of the Section for the ensuing year: Chairman, Dr. A. W. Hewlett, Ann Arbor; Vice-Chairman, Dr. A. S. Carlson, Chicago; Secretary, Dr. William Ophüls, San Francisco; thus making the Executive Committee consist of Drs. Yandell Henderson, New Haven; H. Gideon Wells, Chicago, and Dr. Leo Loeb, St. Louis; Delegate, Dr. Yandell Henderson, and Alternate, Dr. J. W. Vaughan, Detroit.

It was moved and seconded that these nominations be accepted. Carried.

Dr. A. L. Soresi, New York, read a paper on "The Physiopathologic Aspects of the Use of Blood as a Therapeutic Agent." Discussed by Drs. J. Sheldon Forster, Richmond; J. A. Roddy, Philadelphia; LeGrand Kerr, New York; B. Vincent, Boston, and A. L. Soresi, New York.

Dr. J. Harold Austin, Philadelphia, read a paper on "The Rothlisberger Urinometer for the Study of the Uric Acid of the Blood-Serum." No discussion.

Drs. R. M. Fearce, J. H. Austin and E. B. Krumbhaar, Philadelphia, read a paper on "The Influence of Splenectomy on the Production of Hemolytic Jaundice." No discussion.

Drs. J. Shelton Horsley and C. C. Coleman, Richmond, Va., read a paper on "Experimental Devascularization of Segments of Intestine, with and without Mechanical Obstruction." No discussion.

Drs. Howard T. Karsner and J. Earle Ash, Boston, read a paper on "Studies in Infarction; Experimental Bland Infarction of the Lungs." Discussed by Drs. W. G. MacCallum, New York, and Howard T. Karsner.

Dr. J. H. Austin, Philadelphia, read a paper on "The Use of the Crehore Micrograph in Clinical and Experimental Studies of Cardiovascular Conditions." Discussed by Drs. A. W. Hewlett, Ann Arbor, and J. H. Austin, Philadelphia.

### THURSDAY, JUNE 6—AFTERNOON

For the papers read in the Symposium on Anesthesia at the joint meeting with the Section on Pharmacology and Therapeutics, see minutes of the latter Section given on a preceding page.

### FRIDAY, JUNE 7—MORNING

Drs. William Salant and J. B. Rieger, Washington, D. C., read a paper on "The Elimination and Toxicity of Caffein in Nephrectomized Rabbits." Discussed by Drs. Leo Loeb, St. Louis, and William Salant, Washington.

Dr. Creighton Wellman, New Orleans, read a paper on "Experiments with Louisiana Rice as Bearing on the Etiology of Beriberi." No discussion.

Bacteria Supposed to be Concerned in the Production of Leprosy. (Extemporaneous discourse.)

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## SECTION ON PREVENTIVE MEDICINE AND PUBLIC HEALTH

### TUESDAY, JUNE 4—AFTERNOON

The Chairman, Dr. Rupert Blue, called the meeting to order at 2:21 p. m.

Dr. Blue then read his Chairman's address and oration. Discussed by Dr. Rosalie Slaughter Morton, New York.

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Dr. Le Grand Powers, Washington, D. C., read a paper on "Standardizing Health Board Statistics." Discussed by Drs. William F. Snow, Sacramento, Cal.; Alexander C. Abbott, Philadelphia, and Le Grand Powers, Washington, D. C. During the discussion Dr. Snow moved the adoption of a resolution, which was carried, as follows:

Moved that a committee be appointed by the Chairman of the Section, to consist of those who now are or who have in the past been actively identified with the administration of our municipal and state health departments, to cooperate with the officials of the Bureau of Census and with any committee that may be appointed by the Association of Municipal Health Officers to arrange a scheme of standard or uniform accounts and reports of municipal departments of health, and that the paper submitted this day by Dr. L. G. Powers of the Bureau of Census be respectfully referred to said committee for careful consideration.

The Chairman appointed Drs. W. F. Snow, San Francisco; W. A. Evans, Chicago; H. M. Bracken, Minneapolis; G. T. Schwartz, Providence, R. I., and C. H. Jones, Baltimore, as the committee.

Dr. Rosalie Slaughter Morton, New York, presented the following:

WHEREAS, The resolution passed by this Section on June 29, 1911, relating to the establishment in colleges of a course on practical sanitation has not been officially brought to the attention of the Council on Medical Education, I move that the delegate of the Section be instructed to present this resolution to the Council on Medical Education, and to report to this section on Thursday, June 6, 1911, at 9 a. m.

Motion duly seconded and carried.

Dr. H. M. Bracken, Minneapolis, presented motions: (1) for the appointment of a Committee on Resolutions; and (2) for the appointment of a Nominating Committee; which were duly seconded and carried.

Dr. J. W. Kerr, Washington, D. C., had a paper on "The Desirability of Uniform Methods of Procedure in Quarantine Practice, Especially as Relates to the Minor Infectious Diseases," which was read in his absence by Dr. W. C. Rucker, Washington, D. C. Discussed by Drs. Alexander C. Abbott, Philadelphia; G. T. Schwartz, Providence, R. I.; Franklin Royer, Harrisburg, Pa.; William A. Howe, Albany, N. Y.; William F. Snow, Sacramento, Cal., and George Frederick Rinehart, Berkeley, Cal.

The Chairman then announced his appointments for following: (1) Committee on Nominations: Drs. C. A. Harper, Wisconsin; George W. Stoner, New York, and Fritz Rinehardt, California. (2) Committee on Resolutions: Drs. J. F. Hurty, Indianapolis; M. P. Ravenel, Madison, Wis., and Otto P. Geier, Cincinnati.

Dr. William F. Snow, Sacramento, Cal., read a paper on "A Cost-Finding System for Health Departments:" Discussed by Drs. Alexander C. Abbott, Philadelphia; Pauline M. Townsend-Hanson, Marshalltown, Ia.; W. C. Rucker, Washington, D. C.

Dr. C. Hampson Jones, Baltimore, adverted to Dr. Kerr's paper of the morning and presented a motion for the appointment of a committee of three, Dr. Kerr as chairman, to study the question of quarantine and report at the next annual meeting; which motion was seconded and carried.

Dr. M. Solis-Cohen, Philadelphia, read a paper on "Reporting of Suspicious Cases by the Laity, a Prerequisite for the Efficient Control of Communicable Diseases." Discussed by Drs. William A. Howe, Albany, N. Y.; Walton Forest Dutton, Carnegie, Pa.; Otis B. Nesbit, Valparaiso, Ind.; Le Grand Powers, Washington, D. C.; Martin Friedrich, Cleveland; Creighton Wellman, New Orleans, La.; Pauline M. Townsend-Hanson, Marshalltown, Ia.; Arthur P. Reynolds, Chicago; M. Solis-Cohen, Philadelphia.

Dr. Walton Forest Dutton, Carnegie, Pa., read a paper on "Laws Relative to the Sanitary Control of Public Eating- and Drinking-Places."

Dr. Guy L. Kiefer, Detroit, read a paper on "The Control of Contagious Diseases in a Municipality."

These two papers were discussed by Drs. Pauline M. Townsend-Hanson, Marshalltown, Ia.; Otto P. Geier, Cincinnati; William A. Howe, Albany, N. Y.; Seneca Egbert, Philadelphia; Mary Dunning Rose, New York; Walton Forest Dutton, Carnegie, Pa., and Guy L. Kiefer, Detroit.

### WEDNESDAY, JUNE 5—MORNING

The Chairman appointed Drs. Kerr, Abbott, Royer, Kiefer and Wellman as a Committee on Uniform Methods of Procedure in Quarantine Practice, to report at the 1913 meeting.

The Chairman stated that a number of resolutions adopted last year at the Los Angeles session had been referred to the House of Delegates with favorable recommendation, but the House had not acted thereon; that, therefore, it would be necessary to take them up for final disposition, with request to the House to take action. (See JOURNAL, June 15, p. 1912.)

C. Hampson Jones, Baltimore, moved the readoption of said resolutions and their reference to the House of Delegates; which motion, being duly seconded, prevailed.

W. A. Evans, Chicago, as delegate from the Section to the House of Delegates, asked for instructions concerning the continuance of the midwinter Conference on Health as held last February in Chicago. G. T. Schwartz, Providence, R. I., moved that the delegate be advised that the Section desired that the midwinter meeting be not continued. Motion adopted.

The following papers were then read as a Symposium on Industrial Diseases in a joint meeting with the American Association for Labor Legislation, Mr. Henry R. Seager, president of that organization, in the chair.

Dr. W. Gilman Thompson, New York: "Classification of Occupational Diseases."

Dr. J. A. Fordyce, New York: "Occupational Skin Diseases."

Dr. Charles L. Dana, New York: "Occupational Nerve and Brain Diseases."

Dr. Ellice Alger, New York: "Occupational Eye Diseases."

Dr. Mark D. Stevenson, Akron, Ohio: "Occupational Eye Diseases and Accidents."

Dr. David L. Edsall, Boston: "Industrial Poisoning."

Mr. Henry R. Seager, New York, read a paper on "The Need of Cooperation in Promoting Industrial Hygiene."

The seven papers in this symposium were discussed by Dr. A. M. Harvey, Chicago; Mr. C. C. Curtis, New York; Mrs. Florence Kelly, New York; Dr. C. F. Stokes, Surgeon-General, U. S. Navy; Dr. Pauline M. Townsend-Hanson, Marshalltown, Ia.; Mr. Miles M. Dawson, New York; Prof. S. M. Lindsey, New York; Allen Starr, New York; Dr. Otto P. Geier, Cincinnati; Dr. W. F. Dutton, Carnegie, Pa.; Dr. Charles S. Frost, Waterford, N. Y.; Mr. Henry R. Seager, New York.

Dr. Warren Coleman, New York, offered the following motion, which was seconded and adopted:

That a petition be presented to the House of Delegates of the Association from the Section on Preventive Medicine and Public Health requesting the appointment of a permanent committee on industrial diseases, to cooperate with the American Association for Labor Legislation in the promotion of the study and prevention of industrial diseases.

### WEDNESDAY, JUNE 5—AFTERNOON

A joint meeting was held with the Section on Pharmacy and Therapeutics (see minutes on page 1991).

### THURSDAY, JUNE 6—MORNING

The Committee on Nominations reported the following nominations: Chairman and Orator on State Medicine, Dr. H. M. Bracken, Minneapolis, Minn.; vice-chairman, Dr. W. F. Snow, Sacramento, Cal.; secretary, Dr. C. Hampson Jones, Baltimore; delegate, Dr. A. W. Freeman, Richmond, Va., and alternate, Dr. Creighton Wellman, New Orleans.

Dr. W. A. Evans, Chicago, nominated Dr. Guy L. Kiefer, Detroit, as chairman. Dr. Kiefer was elected Chairman and Orator on State Medicine, and the Committee's nominees, Drs. Snow and Jones, vice-chairman and secretary, respectively. The members of the Executive Committee thus became: Drs. J. N. Hurty, Indianapolis; W. A. Evans, Chicago, and Rupert Blue, Washington, D. C.

Dr. W. A. Evans, Chicago, nominated as delegate Dr. M. P. Ravenel, Madison, Wis., who was elected.

Dr. Pauline M. Townsend-Hanson, Marshalltown, Ia., nominated Dr. Rosalie Slaughter Morton, New York, as alternate.

Dr. Creighton Wellman, New Orleans, the committee's nominee, withdrew in favor of Dr. Morton, who was then elected.

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Dr. Pauline M. Townsend-Hanson, Marshalltown, Ia., presented the following:

*Resolved*, That the program committee be instructed to arrange for a symposium on the relation of poverty to disease and measures calculated to reduce poverty.

The resolution was discussed by Drs. W. A. Evans, Chicago; Creighton Wellman, New Orleans, La.; Pauline M. Townsend-Hanson, Marshalltown, Ia.; J. H. White, New Orleans, La.; W. F. Snow, Sacramento, Cal., and Joseph Goldberger, Washington, D. C., and seconded and carried.

Dr. C. E. Ford, Cleveland, moved that the Section's delegate be instructed if possible to bring the meeting of the International Congress on Hygiene, which meets in Washington in September, to the notice of the House of Delegates, or, if impossible, then to the Board of Directors, that the American Medical Association may consider the propriety of taking part in the congress. Motion duly seconded and carried.

Dr. Otis B. Nesbit, Valparaiso, Ind., read a paper entitled "Is Scarlet Fever Carried by Books?" Discussed by Drs. W. A. Evans, Chicago; C. E. Ford, Cleveland; Joseph Goldberger, Washington, D. C., and Otis B. Nesbit, Valparaiso, Ind.

Dr. A. J. Wehr, Baltimore, assisted by Shepherd T. Powell, Baltimore, read a paper on "Purification of Water-Supplies for Small Towns" (illustrated by stereopticon). Discussed by Drs. C. Hampson Jones and A. J. Wehr, Baltimore.

Drs. William Royal Stokes and F. W. Hachtel, Baltimore, had a paper on "A Preliminary Report on the Treatment of Baltimore Drinking-Water with Calcium Hypochlorite" (read by Dr. Harry W. Stoner, Baltimore). Discussed by Drs. M. L. Holme, Lansing, Mich.; and Sheppard T. Powell, C. Hampson Jones, and Harry W. Stoner, all of Baltimore.

Dr. Otto P. Geier, Cincinnati, read a paper on "The Application of Medicosociology in Civic Betterment." Discussed by Drs. Rosalie Slaughter Morton, New York; W. A. Evans, Chicago; H. M. Bracken, Minneapolis; C. Hampson Jones, Baltimore; M. P. Ravenel, Madison, Wis.; J. N. Hurty, Indianapolis, and Otto P. Geier, Cincinnati.

Dr. Eleanora S. Everhard, Dayton, Ohio, chairman of the Committee on Public Health Education Among Women, presented a synopsis of the report of the committee to the Council on Health and Public Instruction [given in THE JOURNAL, June 8, p. 1810].

Dr. Allan J. McLaughlin, Washington, D. C., had a paper (read by Dr. W. C. Rucker, Washington, D. C.) on "Relation of Interstate Waters to the Spread of Typhoid." Discussed by Drs. H. M. Bracken, Minneapolis, and W. C. Rucker, Washington, D. C.

Dr. J. S. Neff, Philadelphia, read a paper on "Local Typhoid Outbreaks." No discussion.

Dr. Rosalie Slaughter Morton, New York, stated that the Section had referred the resolution regarding the establishment of a course in practical sanitation, endorsed by the Section in 1911, to the Council on Medical Education, and called on the Secretary to read the report received by the Section. The secretary read the report. Discussed by Drs. R. S. Morton, New York; H. M. Bracken, Minneapolis; W. F. Snow, Sacramento, Cal.; J. N. Hurty, Indianapolis; Jane L. Berry, New York, and Dr. Oscar Dowling, Shreveport, La.

W. F. Snow, Sacramento, Cal., moved "That it be the sense of this Section that Dr. Morton, the Vice-Chairman of this Section, be requested to present this matter vigorously before the Council, and to request those members of the Section that she may desire to join her in this presentation," which motion duly seconded, was carried.

Dr. Oscar Dowling, Shreveport, La., read a resolution, relating to inspecting and scoring the cleanliness, etc., of "bakeries, dairies, markets and other food-supply establishments, as well as barber shops, hotels, restaurants, doctors' and dentists' offices, and other places where the health and comfort of people are looked after," and asked that it be forwarded to the House of Delegates. Discussed by Drs. Arthur R. Reynolds, Chicago, and Oscar Dowling, Shreveport, La. The resolution was adopted.

Dr. Oscar Dowling, Shreveport, La., presented "Report of Committee on Venereal Diseases," and moved that it be sent to the proper committee. Carried.

### THURSDAY, JUNE 6—AFTERNOON

Dr. Leslie H. Spooner, Boston, read a paper on "Antityphoid Inoculation: Three Years' Experience with its Use in Training-Schools for Nurses in Massachusetts."

Dr. F. F. Russell, Washington, D. C., read a paper on "Typhoid Vaccination in the Army."

Dr. Frank W. Hachtel read a paper by himself and Dr. Harry W. Stoner, Baltimore, entitled "A Further Report on the Preventive Inoculation Against Typhoid in Public Institutions and in Civil Communities."

The three papers of this symposium were discussed by Drs. M. P. Ravenel, Madison, Wis.; Malcolm C. Rose, New York; C. J. Hunt, Harrisburg, Pa.; Leslie H. Spooner, Boston; F. F. Russell, Washington, D. C., and Harry W. Stoner, Baltimore.

Dr. W. C. Rucker, Washington, D. C., read a paper on "The Necessity for Rodent Extermination in American Seaports." No discussion.

Chairman Blue introduced his successor, Dr. Guy L. Kiefer, Detroit, asking him to preside for the remainder of the session. Chairman-Elect Kiefer accordingly took the chair and expressed his appreciation of the honor conferred in his election.

Dr. Richard Cole Newton, Montclair, N. J., read a paper on "A Short Discussion of Some of the Recent Hygienic and Economic Improvements in Dairying." Discussed by Drs. Arthur R. Reynolds, Chicago; Malcolm C. Rose, New York; J. J. Kindred, New York; M. P. Ravenel, Madison, Wis., and Richard Cole Newton, Montclair, N. J.

Dr. C. J. Hunt, Harrisburg, Pa., read a paper on "Results of Epidemiologic Studies of Infection by Typhoid-Colon-Dysentery Groups" (illustrated by stereopticon). Discussed by Drs. C. Hampson Jones, Baltimore; Richard Cole Newton, Montclair, N. J.; A. Parker Hitchings, Glenolden, Pa., and C. J. Hunt, Harrisburg, Pa.

Dr. M. P. Ravenel, Madison, Wis., presented a paper not listed on the program on "The Hygiene of Swimming Pools." This paper was offered after the program had gone to press. It was moved that as the author was present with the paper but as there was not time for the reading the paper be read by title, in accordance with the By-Laws, Chap. XII, Sec. 3. Seconded and carried.

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## SECTION ON NERVOUS AND MENTAL DISEASES

### TUESDAY, JUNE 4—AFTERNOON

The meeting was called to order by the Chairman, Dr. Edward D. Fisher, New York, at 2:30 p. m.

Dr. Fisher then read the Chairman's address, entitled "Injuries of the Spinal Column; With and Without Fracture and Dislocation." No discussion.

Dr. Pearce Bailey, New York, read a paper on "Atypical Dystrophy and Myasthenia." Discussed by Drs. M. Allen Starr, New York; L. J. Leyszinski, New York; Hugh T. Patrick, Chicago; Tom A. Williams, Washington, D. C., and Pearce Bailey, New York.

Dr. Edward Livingston Hunt, New York, read a paper on "Complications in Tabes Dorsalis." Discussed by Drs. L. Harrison Mettler, Chicago; Charles K. Mills, Philadelphia; C. R. Ball, St. Paul, Minn.; A. L. Skoog, Kansas City, Mo.; Tom A. Williams, Washington, D. C.; Albert E. Sterne, Indianapolis, and Hugh T. Patrick, Chicago.

Drs. C. H. Frazier and C. K. Mills, Philadelphia, read a paper on "Intradural Root Anastomosis for the Relief of Paralysis of the Bladder and the Application of the Same Method in Other Paralytic Affections." No discussion.

Dr. M. Allen Starr, New York, read a paper on "The Influence of Defective Secretion of the Ductless Glands as a Cause for Neurosis." Discussed by Drs. F. X. Dercum, Philadelphia; L. Harrison Mettler, Chicago; Edward B. Angell, Rochester, N. Y.; C. R. Ball, St. Paul, Minn.; Tom A. Williams, Washington, D. C.; Albert E. Sterne, Indianapolis; S. Grover Burnett, Kansas City, Mo., and M. Allen Starr, New York.

The Section went into executive session and Albert E. Sterne, of Indianapolis, was elected as a delegate to represent the

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Section in the House of Delegates, vice W. A. Jones of Minneapolis, resigned.

WEDNESDAY, JUNE 5—MORNING

Dr. Hugh T. Patrick, Chicago, read a paper on "Symptomatology of Trifacial Neuralgia." Discussed by Drs. F. W. Langdon, Cincinnati; L. H. Mettler, Chicago; L. J. Leyszinski, New York; Alfred Gordon, Philadelphia; George A. Moleen, Denver; C. R. Ball, St. Paul, Minn.; C. L. Dana, New York, and H. T. Patrick, Chicago.

Dr. A. L. Skoog, Kansas City, Mo., read a paper on "Pathologic Study of a Case of Acute Poliomyelitis."

Dr. M. Neustaedter, New York, read a paper entitled "A Contribution to the Etiology of Poliomyelitis."

These two papers were discussed by Drs. C. L. Dana, New York; Tom A. Williams, Washington, D. C.; E. E. Southard, Cambridge, Mass.; S. Leopold, Philadelphia; Albert E. Sterne, Indianapolis; A. L. Skoog, Kansas City, Mo., and M. Neustaedter, New York.

Drs. James Hendrie Lloyd and S. D. W. Ludlum, Philadelphia, read a paper on "Some Considerations on Primary Lateral Sclerosis." Discussed by Drs. William G. Spiller, Philadelphia; C. L. Dana, New York; Alfred Gordon, Philadelphia; L. J. Leyszinski, New York; Arthur C. Brush, Brooklyn; E. E. Southard, Cambridge; Albert E. Sterne, Indianapolis; J. H. W. Rhein, Philadelphia; J. H. Lloyd, Philadelphia, and S. D. W. Ludlum, Philadelphia.

Dr. C. L. Dana, New York, read a paper on "The Pathology of Little's Disease, with Report of a Case." Discussed by Dr. J. H. W. Rhein, Philadelphia.

Dr. T. H. Weisenburg, Philadelphia, read a paper on "Exhibition of Motion Pictures of Mental Diseases." No discussion.

Dr. Edward Anthony Spitzka, Philadelphia, read a paper on "Some Morphologic Aspects of the Brain with Respect to Race, Sex and Intellect, Illustrated with Appropriate Lantern-Slides." No discussion.

WEDNESDAY, JUNE 5—AFTERNOON

Dr. L. Harrison Mettler, Chicago, read a paper on "Multiple Sclerosis."

Dr. F. X. Dercum, Philadelphia, read a paper on "A Case of Multiple Cerebrospinal Sclerosis, Presenting Unusual Mental Symptoms Suggesting Paresis; Clinical and Pathologic Findings."

These two papers were discussed by Drs. C. R. Ball, St. Paul, Minn.; J. F. Fisher, Los Angeles; J. H. Lloyd, Philadelphia, and F. X. Dercum, Philadelphia.

Dr. Charles A. Elsberg, New York, read a paper on "The Anatomic Basis for Technic of the Surgery of Intramedullary Affections of the Spinal Cord, with Report of Cases." Discussed by Drs. Pearce Bailey, New York; M. Allen Starr, New York, and Charles A. Elsberg, New York.

Dr. H. A. Cotton, Trenton, N. J., read a paper on "The Present Status of Histopathology of the Cerebral Cortex in the Various Mental Diseases, With Demonstration." Discussed by Drs. Albert E. Sterne, Indianapolis; E. E. Southard, Cambridge, Mass.; William W. Graves, St. Louis; George H. Moody, San Antonio, Tex., and H. A. Cotton, Trenton, N. J.

Drs. J. W. McConnell and William G. Spiller, Philadelphia, read a paper on "Clinicopathologic Study of Illuminating Gas Poisoning of the Central Nervous System." No discussion.

Dr. Samuel T. Orton, Worcester, Mass., read a paper on "A Case of Extensive Brain Disease from Endarteritis Probably of Syphilitic Origin." No discussion.

Dr. Alfred Gordon, Philadelphia, read a paper on "Adipositas Cerebralis in Relation to Tumor of Hypophysis." No discussion.

THURSDAY, JUNE 6—MORNING

The Committee on Nominations was appointed as follows: Drs. C. R. Ball, St. Paul, Minn.; A. C. Brush, Brooklyn, and George A. Moleen, Denver.

Dr. C. R. Ball, St. Paul, Minn., read a paper on "Nonne's Four Reactions in Diagnosis of Syphilitic Disease." Discussed by Drs. M. Neustaedter, New York; W. B. Cornell, Hathorne, Mass.; H. T. Patrick, Chicago; A. L. Skoog, Kansas City, Mo.; A. C. Brush, Brooklyn; William W. Graves, St. Louis, and C. R. Ball, St. Paul.

Dr. William Rush Dunton, Jr., Towson, Md., read a paper on "Predementia Præcox."

Dr. William Burgess Cornell, Hathorne, Mass., read a paper on "Cyanosis in Dementia Præcox."

These two papers were discussed by Drs. M. Neustaedter, New York; Katzenellenbogen, New Jersey; B. R. Tucker, Richmond, Va.; L. Harrison Mettler, Chicago; George H. Moody, San Antonio; H. A. Cotton, Trenton, N. J.; C. B. Burr, Flint, Mich.; M. Allen Starr, New York; E. E. Southard, Cambridge, Mass.; W. R. Dunton, Jr., Towson, Md., and W. B. Cornell, Hathorne, Mass.

The Section then went into executive session and the Chairman appointed Dr. Mehlhaus, of New Haven, and Dr. Mettler, of Chicago, on the Executive Committee, in the place of Drs. Jones and Diller, who were absent.

Dr. Arthur C. Brush, Brooklyn, read a paper on "Convulsive Seizures Associated with Postmenstrual Gastro-Intestinal Disorders."

Dr. Edward B. Angell, Rochester, N. Y., read a paper on "The Study of the Urine in Nervousness. A Test of Clinical Importance in Functional Disturbances of the Nervous System."

These two papers were discussed by Drs. Charles W. Hitchcock, Detroit; Katzenellenbogen, New Jersey; George A. Moleen, Denver; Tom A. Williams, Washington, D. C.; Arthur C. Brush, Brooklyn, and Edward B. Angell, Rochester, N. Y.

Drs. Charles E. Atwood and Alfred S. Taylor, New York, read a paper on "A Case of Traumatic Psychosis Associated with an Old Depressed Fracture of the Skull, Frontal Region: Operation; Recovery." Discussed by Drs. L. Pierce Clark, New York; Tom A. Williams, Washington, D. C.; Albert E. Sterne, Indianapolis; S. Grover Burnett, Kansas City; Charles E. Atwood, New York, and Alfred S. Taylor, New York.

Dr. Beverley R. Tucker, Richmond, Va., read a paper on "Some Cases of Hysteria Presenting Symptoms Usually Found Only in Organic Disease." No discussion.

THURSDAY, JUNE 6—AFTERNOON

The Section went into executive session. The following officers were elected unanimously for the ensuing year: Chairman, Dr. Howell T. Pershing, Denver; Vice-Chairman, Dr. W. W. Graves, St. Louis; Secretary, Dr. George A. Moleen, Denver; Delegate, Dr. E. B. Angell, Rochester, N. Y., and Alternate, Dr. George W. Robinson, Kansas City, Mo.

Dr. George A. Moleen, Denver, read a paper on "Erythromelalgia." Discussed by Drs. P. Pierce Clark, New York, and George A. Moleen, Denver.

Dr. L. Pierce Clark, New York, read a paper on "A Clinical Contribution to the Irregular and Unusual Forms of Status Epilepticus." No discussion.

Dr. C. B. Davenport, Cold Spring Harbor, N. Y., read a paper on "Heredity in Nervous Diseases and Its Social Bearings." Discussed by Drs. L. Pierce Clark, New York; A. C. Brush, Brooklyn; Woods Hutchinson, New York; William W. Graves, St. Louis; E. E. Southard, Cambridge; Tom A. Williams, Washington, D. C.; J. N. Hurty, Indianapolis; Warren D. Calvin, Ft. Wayne; H. C. Wood, Jr., Philadelphia; S. Grover Burnett, Kansas City, and C. B. Davenport, Cold Spring Harbor, N. Y.

Dr. Tom A. Williams, Washington, D. C., read a paper on "The Practical Lessons to be Derived from Recent Work on Hysteria." No discussion.

Dr. David Edward Hoag, New York, read a paper on "Pellagra: Its Nervous Manifestations Based on Personal Observations of Several Cases." Discussed by Drs. Paul V. Anderson, Richmond, Va.; George H. Moody, San Antonio, Tex.; B. R. Tucker, Richmond, Va.; Tom A. Williams, Washington, D. C., and D. E. Hoag, New York.

Dr. G. Wilse Robinson, Kansas City, Mo., read a paper on "Unrecognized Tabes and Morphinism." Discussed by Drs. W. B. Swift, Boston; L. H. Mettler, Chicago, and G. W. Robinson, Kansas City.

Dr. N. S. Yawger, Philadelphia, read a paper on "Paranoid Type of Insanity with Jacksonian Convulsions: Syphilitic Pachymeningitis with Microscopic Findings." Discussed by Dr. E. E. Southard, Cambridge, Mass.

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## SECTION ON DERMATOLOGY

TUESDAY, JUNE 4—AFTERNOON

The Chairman, Dr. Charles J. White, Boston, called the meeting to order at 2 p. m. in the Central M. E. Church.

Dr. White then read the Chairman's address, entitled "The Shortcomings of Dermatology."

Dr. M. L. Heidingsfeld, Cincinnati, read a paper on "Benign Epithelioma." Discussed by Drs. Richard L. Sutton, Kansas City, Mo.; H. H. Hazen, Washington, D. C., and M. L. Heidingsfeld, Cincinnati.

Dr. Ludwig Weiss, New York, read a paper on "Parakeratosis Seutularis." Discussed by Drs. Joseph Zeisler, Chicago; William S. Gottheil, New York; W. B. Trimble, New York; A. Ravogli, Cincinnati; L. Duncan Bulkley, New York, and Ludwig Weiss, New York.

Dr. Joseph Zeisler, Chicago, read a paper on "Some Uncommon and Often Unrecognized Forms of Toxic Dermatitis." Discussed by Drs. J. B. Kessler, Iowa City; M. L. Ravitch, Louisville, Ky.; W. B. Trimble, New York; Ludwig Weiss, New York; J. H. Carman, Plainfield, N. J.; J. T. Farrell, Providence, and Joseph Zeisler, Chicago.

Dr. William S. Gottheil, New York, read a paper on "Cancerous Degeneration in Chronic Leg Ulcer." Discussed by Drs. H. H. Hazen, Washington, D. C.; M. L. Heidingsfeld, Cincinnati; A. Ravogli, Cincinnati; L. Duncan Bulkley, New York, and W. S. Gottheil, New York.

Dr. Frank Edward Simpson, Chicago, read a paper on "Kératodermie Blennorrhagique, with Report of a Case." Discussed by Drs. Joseph Zeisler, Chicago; M. L. Ravitch, Louisville; O. H. Foerster, Milwaukee, and F. E. Simpson, Chicago.

Dr. W. B. Trimble, New York, read a paper on "Observations on Keratosis Follicularis." Discussed by Drs. L. Duncan Bulkley, New York; Richard L. Sutton, Kansas City, Mo., and W. B. Trimble, New York.

Dr. Marcus Haase, Memphis, Tenn., read a paper on "Acne." Discussed by Drs. M. L. Ravitch, Louisville, Ky.; H. R. Varney, Detroit; E. S. Lain, Oklahoma City, and M. Haase, Memphis, Tenn.

The chairman announced the following to act as a Nominating Committee: Drs. Isadore Dyer, New Orleans; J. B. Kessler, Iowa City, and William S. Gottheil, New York.

WEDNESDAY, JUNE 5—MORNING

Dr. H. J. F. Wallhauser, Newark, N. J., read a paper on "Pityriasis Rubra (Hebra). Report of a Case." Discussed by Drs. A. Ravogli, Cincinnati; William S. Gottheil, New York; and H. J. F. Wallhauser.

Dr. George Henry Fox, New York, read a paper on "A Broader View of Pityriasis Rosea." Discussed by Drs. A. Ravogli, Cincinnati; Joseph Zeisler, Chicago; H. H. Hazen, Washington, D. C.; Richard L. Sutton, Kansas City, William S. Gottheil, New York, W. B. Trimble, New York; Henry C. Baum, Syracuse; H. J. F. Wallhauser, Newark, and George H. Fox, New York.

Dr. M. L. Ravitch, Louisville, Ky., read a paper on "A Plea for an Earlier Diagnosis of Pellagra." Discussed by Drs. Howard Fox, New York; A. Ravogli, Cincinnati; G. W. Murrell, Richmond, Va.; E. S. Lain, Oklahoma City; Marcus Haase, Memphis; H. H. Hazen, Washington, and M. L. Ravitch, Louisville, Ky.

Dr. A. Ravogli, Cincinnati, read a paper on "Injurious Effects of the X-Ray Applied for Therapeutic Purposes on the Skin." Discussed by Drs. William A. Pusey, Chicago; M. L. Ravitch, Louisville; E. S. Lain, Oklahoma City; William S. Gottheil, New York; Joseph Zeisler, Chicago; C. A. MacMinn, Schenectady, N. Y., and A. Ravogli, Cincinnati.

Dr. Richard L. Sutton, Kansas City, read a paper on "Myomatosis Cutis Disseminata, with the Report of Three Probable Cases of the Condition." Discussed by Dr. M. L. Heidingsfeld, Cincinnati.

Dr. Henry Clay Baum, Syracuse, read a paper on "Hypertrichosis." Discussed by Drs. W. O. Roop, Dayton, Ohio; M. L. Ravitch, Louisville, Ky.; J. B. Kessler, Iowa City; George H. Fox, New York; L. Duncan Bulkley, New York; W. B. Trimble, New York; Joseph Zeisler, Chicago; W. S. Gottheil, New York; J. B. Kessler, Iowa City, and H. C. Baum, Syracuse, N. Y.

WEDNESDAY, JUNE 5—AFTERNOON

For the program of the papers read in the Symposium on Mercury and Salvarsan in the Treatment of Syphilis at a joint meeting with the Section on Pathology and Physiology, see the minutes of the latter section, p. 1992.

THURSDAY, JUNE 6—MORNING

The following officers were elected for the ensuing year: Chairman, Dr. Joseph Zeisler, Chicago; Vice Chairman, Dr. H. R. Varney, Detroit; Secretary, Dr. Howard Fox, New York; Delegate, Dr. Frank C. Knowles, Philadelphia; Alternate, Dr. William T. Corlett, Cleveland.

Dr. L. Duncan Bulkley, New York, read a paper on "Diet and Hygiene in Diseases of the Skin." Discussed by Drs. M. L. Ravitch, Louisville, and L. Duncan Bulkley, New York.

Drs. Harvey P. Towle and Fritz B. Talbot, Boston, read a paper on "The Clinical Histories of Certain Cases of Infantile Eczema which Suggest Disturbance of the Digestion as an Important Causative Factor." Discussed by Drs. M. L. Heidingsfeld, Cincinnati; Isadore Dyer, New Orleans; William T. Corlett, Cleveland; Henry C. Baum, Syracuse; Richard L. Sutton, Kansas City; L. Duncan Bulkley, New York, and Harvey P. Towle, Boston.

Dr. James M. Winfield, Brooklyn, read a paper on "Psoriasis Treated with High Colonic Irrigations and Lactic Acid." Discussed by Drs. L. Duncan Bulkley, New York; M. L. Raviteh, Louisville, and James M. Winfield, Brooklyn.

Dr. Frank C. Knowles, Philadelphia, read a paper on "Psoriasis Familialis." Discussed by Drs. William T. Corlett, Cleveland; James M. Winfield, Brooklyn; Marcus Haase, Memphis, and Frank C. Knowles, Philadelphia.

Dr. J. B. Kessler, Iowa City, read a paper on "Lupus Erythematosus with Superimposed Carcinoma." Discussed by Drs. William A. Pusey, Chicago, and J. B. Kessler, Iowa City.

Dr. William T. Corlett, Cleveland, read a paper on "The Teaching of Syphilis and the Attitude of Hospital Boards Toward that Disease." Discussed by Drs. Abner Post, Boston; John A. Fordyce, New York; William A. Pusey, Chicago; Henry C. Baum, Syracuse; George H. Fox, New York; Isadore Dyer, New Orleans; James M. Winfield, Brooklyn, and William T. Corlett, Cleveland.

Dr. Henry C. Baum, Syracuse, moved that a committee be appointed by the chairman to express the sentiment of the Section as to the needs of improvement in hospital arrangement and modification of the curriculum of medical schools, so as to permit the study and treatment of syphilis in a department by itself, this committee to report at the next meeting of the Section. Carried.

The Chairman appointed, as members of this committee, William T. Corlett, Cleveland; Abner Post, Boston; and Isadore Dyer, New Orleans.

Dr. Dyer suggested that it be understood that this committee, in developing its plans, would be at liberty to solicit the views of any of the members of this Association and of such other persons as might be deemed advisable.

The Chairman thereupon introduced the newly elected Chairman of the Section, Dr. Joseph Zeisler, Chicago, who on assuming the chair, thanked the members for the honor they had conferred on him.

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## SECTION ON HOSPITALS

TUESDAY, JUNE 4—AFTERNOON

The Chairman, Dr. W. B. Russ, San Antonio, called the meeting to order at 2 p. m., in the meeting-room of the Hotel Rudolph.

Dr. William H. Welch, Baltimore, read an address.

Dr. H. D. Arnold, Boston, read a paper on "A Clinical View of The Special Diet." Discussed by Drs. Fred A. Washburn, Boston; C. A. Drew, Worcester, Mass.; C. N. Coons, Wisconsin; W. A. Young, Toronto, Canada; Theodore Potter, Indianapolis; J. O. Skinner, Washington, D. C.; F. M. Bauer, New York; John Allan Hornsby, Chicago; C. N. Cook, Natick, Mass.; Charles Richard, Washington, D. C.; W. B. Cunningham, New York, and H. D. Arnold, Boston.

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Dr. P. E. Truesdale, Fall River, Mass., read a paper on "The Hospital Versus The Home in the Care of Patients—an Evolution." Discussed by Drs. John H. Gifford, Fall River, Mass.; Fred A. Washburn, Boston; George T. Webber, Olney, Ill., and P. E. Truesdale, Fall River, Mass.

The Chairman announced that nominations were in order for delegate from the Section to the House of Delegates. Dr. Fred A. Washburn was nominated and unanimously elected.

WEDNESDAY, JUNE 5—MORNING

Dr. John B. Murphy, Chicago, read a paper on "Hospital Pathology: Asepsis and Cleanliness from the Clinician's Point of View." No discussion.

Dr. Henry M. Hurd, Baltimore, read a paper on "The Proper Division of the Medical Services of the Hospital." Discussed by Drs. A. J. Ochsner, Chicago; B. L. Dorsey, St. Louis; R. R. Huggins, Pittsburgh; A. G. Barrett, Baltimore; L. H. Taylor, Wilkes-Barre, Pa.; C. de N. Hough, New Bedford, Mass.; P. E. Truesdale, Fall River, Mass.; Harvey Smith, Harrisburg, Pa.; Edward Jackson, Denver, and J. A. Hornsby, Chicago.

Dr. F. A. Washburn, Boston, read a paper on "Problems of Hospital Organization."

Dr. Richard C. Cabot, Boston, read a paper on "Out-Patient Medical Service—The Most Important and Most Neglected Part of Hospital Work." Discussed by Drs. C. A. Drew, Worcester; J. A. Hornsby, Chicago, and C. N. Cook, Natick, Mass.

The Secretary offered a resolution on the securing of an appropriation from the Board of Trustees for the purpose of inspecting and standardizing all hospitals by the character of the scientific work being accomplished in them which was unanimously carried and referred to Dr. F. A. Washburn, the delegate of the Section, to be presented to the House of Delegates.

The resolution was discussed by Drs. Henry M. Hurd, Baltimore; F. M. Bauer, New York; E. E. Munger, Spencer, Iowa; G. W. Greene, Chicago; Alice M. Seabrook, Philadelphia (Women's Hospital); F. A. Washburn, Boston, and A. J. Ochsner, Chicago.

Dr. Washburn moved to amend the resolution so as to read "That the Chairman of this Committee be Dr. Hurd." Dr. Hurd declined to serve.

Dr. Washburn made a motion that the resolution as offered by Dr. Hornsby be replaced by the following:

"That a committee of three be appointed, one of whom shall be the secretary of this section, and two others appointed by the chair, shall consider the matter of inspection and classifications of hospitals and report at the next section meeting, a year from now."

A vote on the first resolution was called for.

The Chairman called for a vote on the substitute resolution, the result being eight in favor and seven against the resolution, and the same was adopted.

Dr. Ochsner moved that the House of Delegates be requested to ask the Board of Trustees to provide for an appropriation of sufficient funds to meet the expenses of this committee. The motion was unanimously carried.

WEDNESDAY, JUNE 5—AFTERNOON

Dr. Washburn's paper was discussed by Drs. H. V. Howard (discussion read in Dr. Howard's absence by the Secretary); H. M. Hurd, Baltimore; Ellsworth Smith, St. Louis; G. W. Greene, Chicago; C. W. Coons, Wisconsin, and J. A. Hornsby, Chicago.

Dr. Joseph D. Farrar, Philadelphia, spoke on "The Abuse of the Hospital Free Dispensary," and read the following:

HOSPITAL DISPENSARY COMMITTEE

The committee appointed by the Philadelphia County Medical Society to investigate this matter is of the opinion that the hospital dispensaries are being abused, and we think the adoption of the following card, as recommended by the board of directors of said society and as adopted by the New York State Board of Charities, will serve to eliminate those not entitled to free treatment.

Name ..... Date .....
Dr. ..... Number in family ...
Nationality ..... Address .....
Occupation ..... Man ..... Woman.....
Income ..... Rent ..... This is my ..... application to this dispensary in the year .....
I have been an applicant to no other dispensary in the year .....
(or to the following dispensaries) .....
The foregoing statement is in all respects true.
Signature of applicant .....
Admitted ..... Refused .....

Very truly yours,
C. B. LONGENECKER, Chairman.
JOSEPH D. FARRAR, Secretary.
E. J. G. BEARDSLEY.
E. W. KELSEY.
G. M. ILLMAN.

It was moved and seconded that the Chairman be asked to appoint a committee of three members to memorialize the House of Delegates, presenting all the data at their command, to investigate the matter. Carried.

THURSDAY, JUNE 6—MORNING

Dr. Isaac A. Abt's paper on "Individual Prophylaxis in Children's Hospitals" was read, in Dr. Abt's absence, by the Secretary.

The Secretary then reported that Dr. Washburn had gone to the House of Delegates and presented the resolution passed by this Section to the House of Delegates, which resolution asked for an appropriation to be spent in an investigation for the standardization of hospitals in this country. The Secretary reported that the House of Delegates referred the resolution to the Board of Trustees. That Committee is composed of Dr. H. M. Hurd, Baltimore, Chairman; Dr. Fred A. Washburn, of the Massachusetts General Hospital; and Secretary Hornsby, of the Michael Reese Hospital, Chicago.

The following nominations were made:

Chairman, Dr. H. B. Howard, Boston, and Secretary, Dr. John Allan Hornsby, Chicago. Each was elected by acclamation.

Dr. F. A. Washburn, Boston, was reelected unanimously to the House of Delegates.

Mr. Michael M. Davis, Jr., Boston, read a paper on "The Efficiency of Out-Patient Work."

Dr. Samuel C. Plummer, Chicago, read a paper on "The Relations of the Hospitals to Corporations Interested in Patients."

Mr. M. L. Bell, Chicago, read a paper on "The Legal Aspects of the Relations of the Hospital to Corporations Interested in Patients."

Dr. Charles Richard, Washington, D. C., read a paper on "Relations of the Civil Hospital to the Military Establishment in Time of Peace; in Time of War."

Dr. E. E. Munger, Spencer, Ia., read a paper on "Hospitals and the Health Problem, with Special Reference to the Necessities of Rural America."

The papers all having been read the discussion of them was taken up in the order in which they were read; they were discussed at length by Drs. J. O. Skinner, Washington, D. C.; J. A. Hornsby, Chicago; Swift; Miss McCallum; Dr. S. C. Plummer, Chicago; Mr. McClain; Mr. Bunn, Youngstown, Ohio; Drs. D. S. Fairchild, Clinton, Iowa; Charles Richard, Washington D. C.; G. W. Greene, Chicago; Hoggenberger, Boston.

# Current Medical Literature

## AMERICAN

Titles marked with an asterisk (*) are abstracted below.

### American Journal of Diseases of Children, Chicago

*May, III, No. 5, pp. 277-340*

1 *Tonsils in Childhood. J. G. Wilson, Chicago.
2 *Comparison of Streptococci from Milk and from Human Throat. E. C. Stowell and C. M. Hilliard, Dublin, N. H.
3 *Effect of Cold Fresh Air on Blood-Pressure in Pneumonia of Children. J. Howland, St. Louis, and B. R. Hoobler, New York.
4 *Study of Icterus Neonatorum by Means of Duodenal Catheter. A. F. Hess, New York.

1. **Tonsils in Childhood.**—Wilson discusses the relation of the function of the tonsil so far as we at present know it to

disease, and along these lines indicates the general principles that should underlie treatment. The conclusions which he draws from a discussion of the anatomic embryologic and physiologic data may briefly be stated as follows:

1. Comparative anatomy shows that no matter how the tonsil be shut off from the pharynx by folds or even confined within a special cavity, in all cases a communication with the pharynx has been preserved. This suggests the necessity to tonsillar activity of an intimate relationship with the pharyngeal cavity. 2. Tonsillar activity is to be regarded as most active during developmental life. There is no evidence that the tonsil in the child is a recessive organ. 3. The tonsil cannot be regarded as merely a lymphatic node. Though it presents microscopically adenoid tissue yet its developmental history is different. Further its physiologic activity should at least make us pause before drawing such a conclusion. The justification of an enucleation by the argument that since the tonsil is only a lymphatic gland its activity can be readily replaced by other lymphatic structures, cannot be supported either on physiologic or embryologic grounds. 4. There is reason to believe that the tonsil in the child plays an important rôle in the complex changes which occur at the upper end of the alimentary tract.

Wilson believes that in the child the tonsil is an organ which functionally differs considerably from the same organ in the adult. He therefore distinguished in the life history of the tonsil two periods: (a) before puberty—period of full functional activity; (b) after puberty—period of decreasing functional activity, the gland persisting chiefly as an aggregate of lymph nodules, which are tending to atrophy.

With this distinction in view he believes that the treatment of tonsillar diseases in the child should be as conservative as possible, the younger the child the more conservative. The enlarged tonsil so frequent in early life is not necessarily pathologic. It should rather be regarded as an indication of functional activity. In children many of the symptoms attributed to enlarged tonsils are in the main due to concomitant adenoids. But there are certain well-defined symptoms which indicate when we may well interfere, for example, obstruction to respiration, a liability to frequent attacks of inflammation and chronic toxemia. There is clinical evidence which points to some causal relation between chronic focal infection in the tonsil and arthritic and cardiac affections. While bearing this in mind Wilson finds it difficult to correlate the frequency of focal infection in the tonsil with the infrequency of a concomitant or subsequent arthritic affection. He discusses the infrequency of primary tuberculous disease of the tonsil and its association with the small hypofunctionating organ. This infrequency is the more interesting when we consider the liability of the child to tuberculous invasion, and the anatomic structure and position of the tonsil exposing it to infection in a way that few other organs are exposed. If the soil were as favorable as the bacteria are common, tuberculous tonsils would be the rule and not the exception. He insists that in the child there is evidence to show the more than probable relation of the function of the tonsil to metabolic processes in the upper respiratory and alimentary tracts especially at their junction in the pharynx. The tonsil in the child protects these tracts and is associated directly with their well-being.

2. **Streptococci from Milk and from Human Throat.**—The authors' work shows that streptococci from the human throat and from fresh milk very generally ferment one or more of the sugars, dextrose, lactose, maltose and saccharose, attacking them most readily in the order named. They do not generally ferment raffinose or mannite. The streptococci of the sore throat and the normal throat show no cultural differentiation in relation to the carbohydrates used. Virulence tests might have separated the two groups. The throat streptococci do not readily ferment at 20 C. any of the sugars used, while the milk organisms attack the same sugars and to the same extent at this temperature as at 37 C. This is, perhaps, the most valuable differential feature between chained cocci from these two sources.

3. **Blood-Pressure in Pneumonia of Children.**—The patients whose clinical histories form the basis of this study were treated in the wards of Bellevue Hospital, which are thoroughly ventilated and usually kept at a temperature of about 65 F. (18 C.), or on the balconies outside of the wards. In the wards they were covered lightly with blankets; outside they were clothed in woolen wrappers and covered with many blankets, according to the temperature. Hot water bottles were at their feet and they wore hoods. Only the faces were exposed. None was receiving circulatory stimulation at the time that the readings were made. The effect of cold fresh air in patients with active pneumonia was always to produce a rise in blood-pressure and removal to a warm but well-ventilated ward produced a fall in blood-pressure. The authors never found this to fail, although in one or two instances the variation in pressure was not as noticeable as in most of the cases. The rise is not apparent until half an hour or more, sometimes not until an hour, after being put out of doors and it does not reach its maximum for about two hours. Thereafter the effect is continuous for even as long as thirty hours and there was not observed any tendency for the pressure to fall as if from exhaustion of the effect.

The authors did not make observations on any fatal cases that were treated continuously out of doors and are therefore unable to say what would be the behavior of the blood-pressure in cases growing constantly worse and progressing to a fatal termination. On the other hand, after removal from the cold fresh air the blood-pressure falls rapidly; the fall is apparent in fifteen or twenty minutes and usually reaches its lowest point in an hour, to remain at this minimum unless influenced by the course of the disease, by stimulation, or by the child's again being placed out of doors, when it again rises.

In convalescents, on the contrary, the results are usually much less striking and may even be absent. Instead of a rise of 10 or 15 mm. of mercury, the difference is only a few millimeters or none at all. The authors were unable to produce results by putting children out of doors in warm weather; as the temperature increases in the spring and the out-of-doors temperature approaches that of the ward, the effects are less and less marked until none whatever is produced. It would seem therefore, that the all important factor is the cold. They are of the opinion that the influence on the blood-pressure is undoubtedly brought about by reflex stimulation of the vasomotor center by the action of cold air on the skin of the face and on the nasal mucous membrane. No other part of the child is exposed and there is no additional factor that can be supposed to play a part. The symptoms of the death of children from pneumonia are those of vasomotor failure. It is rare to see intense cyanosis, edema of the lungs and evidences of right heart incompetency. Whether under such circumstances cold air would have an influence in assisting the circulation cannot be stated.

4. **Icterus Neonatorum.**—Tests made by Hess by means of the duodenal catheter showed that bile is very rarely excreted during the first twelve hours of life; it was obtained but once in the course of fifty-two tests. Bile excretion during the subsequent twenty-four hours is variable; in cases of marked jaundice it is profuse; in cases not jaundiced it is scanty or absent. The function of excretion gradually becomes fully established during the first week or ten days of life.

Where jaundice manifests itself, it precedes the excretion of bile into the duodenum. Secretion of bile varies within wide limits. In general it is marked when the jaundice is marked. The occurrence of jaundice results from a defective correlation of excretion and secretion. It is generally caused by the inability of the rudimentary excretion to cope with the sudden profuse secretion of bile.

## Journal of Iowa State Medical Society, Washington

*May 15, I, No. 11, pp. 589-652*

5 Management of Cataract Cases. H. B. Gratiot, Dubuque.
6 Parinaud's Conjunctivitis; Report of Two Cases. R. M. Lapsley, Keokuk.
7 Surgical Diseases of Colon. A. M. Pond, Dubuque.
8 Mastoiditis and Allied Affections. L. L. Henninger, Council Bluffs.
9 Medical Profession and Public. F. P. Lierle, Marshalltown.
10 Conservatism in Enucleations. C. P. Frantz, Burlington.
11 Acute Osteomyelitis. D. C. Brockman, Ottumwa.
12 Raynaud's Disease. W. C. McGrath, Eagle Grove.

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### Monthly Cyclopedia and Medical Bulletin, Philadelphia

*May, XV, No. 5, pp. 257-320*

13 *Surgery of Kidney. W. W. Babcock, Philadelphia.
14 *Epilepsy in Adult Life in Association with Thyroid Disease. M. K. Meyers, Philadelphia.
15 Industrial Status of Epilepsy. M. Woods, Philadelphia.
16 Treatment of Joint Diseases and of Conditions Simulating Them, by Physical Manipulation. L. Von Cotzhausen, Philadelphia.

13. Also published in the *Pennsylvania Medical Journal* for May and abstracted in THE JOURNAL, June 15, p. 1882.

14. **Epilepsy and Thyroid Disease.**—One of Meyers' patients, suffering with exophthalmic goiter, was entirely relieved of her attacks of epilepsy during her successive pregnancies. Another woman is sterile. In a case of epilepsy developing in adult life, unassociated with enlargement of the thyroid, but accompanied by a well-compensated mitral insufficiency, the onset of the epilepsy began at a delayed menstrual period one or two months before the woman became pregnant for a second time, and was aggravated rather than mitigated during her pregnancies. In another case associated at present with mild thyroid enlargement, the epilepsy developed six months after the eclampsia of pregnancy; the patient had previously suffered from an attack of puerperal eclampsia. In three of Meyers' cases there is a distinct enlargement of the thyroid; in all these cases there was a history of enlargement of the thyroid gland in other members of the families. In one other case, however, there was no thyroid enlargement in other members of the family.

In one of these cases enlargement of the thyroid was attended with general obesity. The mental attitude was one of general restlessness, anxiety and forgetfulness of recent events, attended with a rapid, high-pitched, agitated, quavering manner of speech. The woman frequently experienced periods of mental depression, during which she was inclined to weep. For some time after she has had an epileptic convulsion her mind is confused. At the present time she suffers from menorrhagia. Some of the above effects Meyers attributes to the epileptic convulsions *per se*; others, chiefly the obesity, the menorrhagia, and the general disturbance of menstruation, to the thyroid condition. In spite of a curettement the woman remains sterile.

Another of the three patients presents an enlargement of the thyroid associated with mild thyrotoxicosis. None of the patients has as yet received systematic treatment with thyroid extract. The improvement of most of Meyers' epileptics on routine bromid treatment (small doses), moderate restriction of salt, appropriate diet, a sufficient quantity of fluids in the form of milk or water, regularity of habits, and a daily bowel movement has been eminently satisfactory to him.

### Lancet-Clinic, Cincinnati

*May 25, CVII, No. 21, pp. 559-586*

17 *Treatment of Movable Kidney. W. Billington, Birmingham, England.
18 Wearing Glasses. D. S. Reynolds, Louisville, Ky.
19 Present-Day Methods to Determine Cure of Gonorrhea. J. W. Miller, Cincinnati.

*June 1, CVII, No. 22, pp. 587-612*

20 Oral Hygiene Movement. S. J. Rauch and Others, Cincinnati.
21 Team Work. E. O. Adams, Cleveland.
22 Recurrent Club Feet. H. R. Allen, Indianapolis.

17. Abstracted in THE JOURNAL, Nov. 11, 1911, p. 1636

### Archives of Diagnosis, New York

*April, V, No. 4, pp. 169-208*

23 *Diagnostic Significance of Paravertebral Triangle of Percussion Dulness (Grocco's Sign). F. Smithies, Rochester, Minn.
24 Diagnosis of Lobar Pneumonia. G. R. Butler, Brooklyn.
25 *Delineation of Heart by New Method. R. Abrahams, New York.
26 Sacrococcygeal Sinus (Postanal Dermoid); Review of Thirty-One Cases. H. Z. Giffin and A. Archibald, Rochester, Minn.
27 Early Diagnosis of Perforation of Gastric and Duodenal Ulcer and Its Operative Treatment. B. T. Tilton, New York.
28 *Determining Importance of Loose Kidney. R. T. Morris, New York.
29 *Unfailing Procedure for Diagnosing or Excluding Existence of Ectopic Pregnancy. S. W. Bandler, New York.
30 Diagnosis of Pathologic Conditions in Pelvis of Fat Women. S. D. Jacobson, New York.
31 Indicanuria. A. L. Benedict, Buffalo.
32 Intestinal Indigestion: Some Considerations of Diagnosis. H. Barclay, New York.
33 Neuropathic Constitution an Etiologic Factor in Poliomyelitis. M. Neustaedter, New York.
34 Prognosis in Acute Epidemic Poliomyelitis as to Life and Disability. J. V. Manning, Brooklyn.

23. **Grocco's Sign.**—In cases in which fluid exists in a pleural sac and this fluid impinges on the spine, Smithies says, it is possible to map out, in the average patient, an area of percussion dulness on the side of the spine opposite to that on which effusion may be demonstrated (Grocco's sign). This paravertebral area is an area of relative dulness, and is roughly triangular in outline. It may disappear when the patient changes position, or it may in that event be altered in shape or extent. The triangular area is frequently associated with auscultatory findings similar to those existing in connection with pleural exudate or lung tissue whose air content is altered. Paravertebral dulness may be the result of physical or pathologic conditions other than pleural effusion. These may be intrathoracic or extrathoracic. In intrathoracic disease, as pneumonia, mediastinal tumor, lung abscess and the like, dulness to the opposite side of the spine may be definitely determined. This dulness usually does not satisfy either the physical phenomena or the clinical requirements associated with paravertebral dulness due to free fluid in the pleural sac. The same may be said of paravertebral dulness associated with extrathoracic conditions, e. g., ascites, subphrenic abscess, abdominal tumor, etc. A certain amount of experience with the sign and skill in thoracic percussion is requisite for its proper demonstration. Even where more than common skill is available, the presence of thick parietes, fibroid pleura, improper position of the patient, etc., may mask the area of paravertebral dulness associated with pleural exudate reaching mesially to the vertebral column.

25. **Delineation of Heart.**—This new method described by Abrahams is a method of auscultation, pure and simple. He says: In employing this new procedure the patient may assume any position he pleases, sitting, standing or reclining. After having outlined the size and shape of the supposedly normal heart, place the stethoscope two or more inches beyond the indicated borders of the heart. The stethoscope is preferably placed in the interspaces on either side of the precordial area. The patient is ordered to repeat "one, two, three," or "99" in an ordinary tone of voice. The effect is, that as long as you listen to lung tissue, the figures which the patient repeats will be heard coming from the lungs. As the stethoscope approaches the borders of the heart the voice grows less distinct, and as the borders of the heart are finally reached, instead of hearing the voice coming from the lungs one hears it coming more from the lips. Wherever the ear or the stethoscope reveals a change in the voice, there a mark is made with pen or pencil. These marks are afterwards joined and form a line; this line constitutes the border of the heart, right or left, as the case may be. The whispered sound furnishes the same information as the spoken voice. It is well to employ both so that one may control the other. The upper border of the heart is delineated in the same way; its definition is quite striking.

The superficial area of the heart is outlined by the same method and with the same ease and accuracy, perhaps more so. The stethoscope is carried from the superficial to the deep area while the patient is repeating the conventional figures, either aloud or in a whisper. As long as the instrument traverses over heart covered by lung, lip sound will predominate over lung sound. As soon, however, as uncovered heart is touched all previous sound disappears, the voice and the whisper become completely extra-stethoscopic, as it were. This method it is claimed by Abrahams can be employed advantageously in ascertaining the presence of fluid in the pericardial cavity. Adapting the same procedure it will be found that as soon as the edges of the effusion are reached, both the spoken voice and the whispered sound will terminate abruptly. This abrupt disappearance of sound is pathognomonic of the condition. The amount of the effusion need not necessarily be large to produce this auscultatory phenomenon. Small amounts will do the same, only that when the quantity of fluid is moderate the patient should be placed in the recumbent position in

order to level the fluid in the pericardial sac. Abrahams applies this method to the delineation of the solid organs which encroach on the thoracic cavity, like the liver and spleen.

28. **Loose Kidney.**—By what diagnostic sign, asks Morris, may we instantly suspect that a loose kidney is really the precipitating factor, a contributing factor, or the dominating factor in cases of parenchymatous nephritis, of gastric hyperacidity, of congestive appendicitis? By finding the condition of "splint-belly," rigidity of the muscles of the abdominal wall. When we have persistent splint-belly, associated with demonstrable loose kidney, it means that nature is trying to put a splint on the kidney to keep it from moving about and making trouble. Splint-belly, in cases of loose kidney, seems to vary in degree proportionately to the disturbance caused by loose kidney. Some of the patients have abdominal muscles which are rigid day in and day out; in most cases in which loose kidney is a real factor in the patient's discomfort, we may promptly notice on examining the abdomen a rigidity which has a meaning. In patients with diastasis of the rectus muscle and relaxed abdominal walls with visceral ptosis, nature cannot place such a splint on the loose kidney, and we are deprived of the diagnostic sign, but practically this latter group of cases is one in which loose kidney seems to be least important, because general relaxation of all abdominal structures allows general adjustment. Structures out of position seem to accommodate themselves to each other in panptosis.

When the sign of splint-belly points directly toward loose kidney, what is to be done? First, give general abdominal support. This lessens the range of the loose kidney, and all symptoms may change rapidly enough to show that we are on the right road. Having determined that point, the next step is to consider the advisability of having a loose kidney sutured in place instead of depending on abdominal supporters. An operation which can be done frequently in ten minutes or less, with assured permanent fixation of the kidney, is held to be more desirable than the wearing of abdominal supporters, by many patients.

29. **Ectopic Pregnancy.**—The diagnosis in doubtful cases is made by Bandler by the simple procedure of a posterior or anterior colpo-celiotomy, preferably the latter. The uterus is examined with the sound, it may be curetted; the amount and character of the scrapings may be noted; examination of the adnexa may be made under the most favorable opportunity by delicate bimanual touch, and then the peritoneum is exposed or the peritoneal cavity is entered, preferably by the anterior vaginal route, and in this way the uterus, tubes and ovaries are brought into view. The diagnosis is made, and if ectopic gestation is found the operation may be completed by the vaginal path. And if, for any reason, because of technical difficulties, or lack of skill on the part of the operator, or because there is active bleeding going on, the operation is not to be completed vaginally, the vaginal incision is closed and the operation is completed by the abdominal path.

### Southern California Practitioner, Los Angeles

*May, XXVII, No. 5, pp. 205-252*

35 Ethyl Chlorid as a General Anesthetic. C. E. Reynolds, Los Angeles.
36 Los Angeles County Hospital Tuberculosis Problem. C. H. Whitman, Los Angeles.
37 Relation of Certain Pathologic Conditions of Liver and Gall-Bladder to Life Insurance. C. W. Pierce, Los Angeles.
38 Principles and Practice of Spondylotherapy. A. Abrams, San Francisco.
39 Complete Outward Dislocation of Elbow. R. O. Butterfield, Los Angeles.
40 Pernicious Anemia. C. R. Nyberg, Phoenix, Ariz.
41 Physiology of Dinner Table. R. S. Levenson, Los Angeles.
42 Lupus Erythematosus. H. E. Stroud, Los Angeles.

### Medical Record, New York

*June 1, LXXXI, No. 22, pp. 1019-1064*

43 Vertigo as Symptom of Disease of Nervous System. J. Collins, New York.
44 Surgical Management of Nasal Accessory Sinus Disease. L. A. Coffin, New York.
45 Treatment of Carcinoma by Selenium. E. G. Kessler, New York.
46 Treatment of Diseases of Vegetable Parasitic Origin by Deep Muscular Injections of Mercuric Succinimid. R. L. Wright, U. S. N.
47 *Results of Renal Decapsulation for Chronic Nephritis. S. Lloyd, New York
48 Tonsillar Hemorrhage, Causes, Prevention and Treatment. G. H. Cocks, New York.
49 *Identity of Typhus Fever and Brill's Disease. N. E. Brill, New York.
50 Abuse of the Scalpel Edge. D. H. Stewart, New York.
51 *Use of Medicated Suppositories for Vaginal Application. G. W. Kosmak, New York.
52 Diagnostic Use of Gonococcus Vaccine for Gonorrheal Infections. E. H. Elsing, New York.

*June 8, LXXXI, No. 23, pp. 1065-1124*

53 *Best Means of Combating Infant Mortality. A. Jacobi, New York.
54 Heliotherapy in Surgical Tuberculosis. G. Austin, Paris, France.
55 Relation of Clinical Professor to Hospital, Community, Medical School and Profession. J. D. Morgan, Washington, D. C.
56 *Thermo-Hydropathic Treatment of Typhoid and Other Inflammatory Conditions. E. S. Goodhue, Honolulu, Hawaii.
57 Significance of Ratio of Free Hydrochloric Acid to Total Acidity in Determining Impaired Motility of Stomach. A. E. Austin, Boston.
58 *Influence of Sodium Chlorid on Hydrochloric Acid of Gastric Juice. S. Floersheim, New York.

47. **Renal Decapsulation for Chronic Nephritis.**—Renal decapsulation for chronic nephritis is recommended by Lloyd. In Edebohls' 102 operative cases thirty-three patients were cured at the time of his report, while in the last nineteen patients (six by Edebohls and thirteen by Lloyd) eight are recorded as free from all clinical and urinary symptoms for six months or more. This makes forty-one cured out of 128 patients which Lloyd regards as being surely a good enough showing to make the operation well worth while.

49. **Identity of Typhus Fever.**—Brill believes that European typhus fever, Mexican typhus fever and Brill's disease have relationships which only knowledge as to their infective agents can clear up.

51. **Medicated Suppositories for Vaginal Application.**—In order to be effective Kosmak says vaginal suppositories ought to be kept in contact with the vaginal vault for a period of at least four or five hours, and this can only be done by adapting their shape to the region in question and by making them of such a size and consistence that they will dissolve slowly. If prepared in the form of a disk about three-eighths of an inch in thickness, slightly concave on one surface to admit the cervix, they can be introduced readily enough with the aid of a speculum, and after being placed against the cervix may be held there by one or two non-absorbent cotton tampons. If they melt slowly their medicinal effect is properly exerted in the region where it is required, and if the patient is directed to remove the tampons at the expiration of say, twenty-four hours, this will not be as disagreeable as with the use of the ordinary glycerin and ichthyol tampons.

53. See THE JOURNAL, June 8, p. 1735.

56. **Treatment of Typhoid.**—Baths in water from 108 F. to 110 F., for a period of ten to fifteen minutes, Goodhue says, leave one feeling comfortable, stimulated and without visible perspiration. Over that temperature and for longer periods, there is apt to be perspiration, which makes it necessary to use friction afterwards, and some precaution as to change of temperature. In taking "cold," during the coryza and sneezing period, in the beginning of bronchitis, pharyngitis, myalgias ("aching all over"), he has found the hot bath almost abortive. A stay in water at a temperature of 105 F. for ten minutes, then getting into bed taking a laxative and a diuretic are sufficient to abort these conditions. A neuritis or neuralgia, a painful "stiff neck," are relieved quickly, and in many cases with the attendant anti-rheumatic treatment.

Goodhue has also found the baths efficacious in lumbago, sciatica and tonsillitis. In glandular involvements, with enlarged glands of the groin, axilla, and neck, the baths are beneficial, producing an immediate softening by elimination and absorption and stimulation of the lymphatics generally. In severe tonsillitis, pharyngitis and laryngitis, hot local applications, preferably hot packs, are valuable. Local infections of the hands or feet he treats by placing in very hot boracic acid solutions, but where there is general infection or in localities not easily treated in this way the hot tub-bath is efficacious. The tense and painful tissues are relieved in most cases. In acute nephritis following infectious diseases, Goodhue has had most satisfactory results, relieving the condition in a few days. One of the conditions in which hot baths are particularly valuable is in premenstrual affections;

amenorrhea, malaise, backache, or any of the distressing symptoms due to disturbed circulation at this period. Half an hour in the tub with the water at a temperature of 108 F. will afford great relief. In hemorrhagic conditions, however, the hot bath is contraindicated. In uterine and ovarian affections the beneficial action of heat is well recognized, and equally so, Goodhue thinks, the unsatisfactory results of ordinary douching, when a little spray of water is for a moment thrown against the mouth or neck of the uterus. The ovaries get no benefit at all, and almost all the good that results is the washing out of the secretions.

58. **Influence of Sodium Chlorid on Hydrochlorid Acid of Gastric Juice.**—It is Fleersheim's experience that the introduction of sodium chlorid into the system has no special influence on the production of hydrochloric acid by the stomach.

## New York Medical Journal

*June 1, XCV, No. 22, pp. 1125-1176*

59 Upright Position in Ether Operations on Nose, Throat and Other Portions of Head. T. B. French, Brooklyn.
60 Value of Warmed Anesthetics. J. T. Gwathmey, New York.
61 *Intravenous Administration of Phenolsulphonephthalein for Ureter Catheter Study of Renal Function. E. L. Keyes and A. R. Stevens, New York.
62 Unfounded Beliefs Concerning Insanity. M. A. Starr, New York.
63 New Principle in Politzer Vaporizing Method of Administering Anesthetics. R. C. Coburn, New York.
64 Abdominal Distress in Children Beyond Infancy. L. Kerr, New York.
65 Tonsillotomy or Tonsillectomy. E. Ianziger, New York.
66 Drop Method of Administering Ether with Special Reference to New Combination Inhaler. H. A. Sanders, New York.
67 Anesthetics in Borough of Manhattan. A. M. Hellman, New York.

*June 8, XCV, No. 23, pp. 1177-1248*

68 *Best Means of Combating Infant Mortality. A. Jacobi, New York.
69 Hygiene of Pregnancy. E. B. Cragin, New York.
70 Pathology of Deaf-Mutism. G. H. Makuen, Philadelphia.
71 *Alopecia; Types and Treatment. I. Dyer, New Orleans.
72 Eugenics and Physician. C. B. Davenport, Cold Spring Harbor, N. Y.
73 Enforcement of Health Laws. T. Darlington, New York.
74 Vaccine Treatment in Ophthalmology. J. H. Clairborne, New York.
75 Some Impositions Practiced on Physician. T. J. Dunn, New York.
76 Paraplegia, Probably Hysterical in Origin. G. Parker, Burin North, Newfoundland.

61. **Renal Function Test.**—A study of twenty-six cases leads the authors to draw the following conclusions: 1. The phenolsulphonephthalein output seems to be little if at all influenced by oliguria or polyuria. The phenolsulphonephthalein percentage agrees as closely as ever with the urea in centigrams (urea percentage multiplied by c.c. of urine). The "delay," i. e., the interval between the injection of the drug and its appearance in the urine, varies widely. Thus in fourteen "normal" kidneys the "delay" varied from two to nine minutes, averaging 4.5 minutes. Yet among thirty-eight "diseased" kidneys no less than twenty-eight showed a delay within the "normal" limits and fourteen of them below the "normal" average, while in two the drug actually appeared in the urine of the diseased kidney, respectively, one and two minutes, before it appeared from the sound one. In the former case, however, microscopic findings, and per cent. excreted excluded all possible error, while in the second case the left kidney, though showing a few pus cells, was probably acting fully as well as its fellow.

But the most striking feature of the "delay" is that it may be approximately equal for two kidneys whose function differs widely. Hence the "delay," whether absolute or relative (as between the two kidneys), is peculiarly misleading and should be taken into consideration only for the purpose of estimating the time at which to begin collecting specimens for phenolsulphonephthalein estimation. When employing intramuscular injections of phenolsulphonephthalein, several times they were chagrined to find that kidneys, which excreted high percentages of phenolsulphonephthalein without cystoscopy, excreted only traces of the drug during an hour when the ureters were catheterized. This inhibition has not occurred after intravenous injection. Indeed so rapid is the output of phenolsulphonephthalein after intravenous injection that accurate readings can almost invariably be obtained in from ten to fifteen minutes after appearance of the color in the urine. Yet the authors feel that enough inhibition may result from cystoscopy to invalidate precise conclusions as to the normality or abnormality of the kidneys from the percentages of phenolsulphonephthalein excreted by ureter catheter even when intravenous injection is employed. Roughly speaking, however, an excretion of 1 per cent. in one minute for the first ten or fifteen minutes is normal.

68. See THE JOURNAL, June 8, p. 1735.

71. **Alopecia.**—The following treatment is recommended by Dyer as a suitable one to be adopted in most cases. The frequent washing of the scalp with green soap or tar, resorcin, naphthol and sulphur soap, and the application of stimulating substances. Of these he mentions chloral hydrate, tincture of jaborandi, spirits of rosemary, cantharides (in tincture and guardedly), tar oils (cade, birch pine, etc.), castor oil, croton oil (in minute quantity), alcohol and chloroform. The use of any application should be intelligent; oily substances used when the scalp and hair are dry; desiccating or alcohol preparations when the hair is oily or the scalp greasy. Combinations may be made antiseptic with resorcin (2 to 5 per cent.), salicylic acid (2 to 5 per cent.), lactic acid (2 to 5 per cent.), bichlorid of mercury (1 to 1,000), or with carbolic acid (not over 2 per cent.) each of which is also somewhat stimulating to hair growth. The use of the high frequency *effluve* in some cases of long standing has proved satisfactory.

## Boston Medical and Surgical Journal

*May 30, CLXVI, No. 22, pp. 799-834*

77 Medical Impressions of America. C. K. Austin, Paris.
78 *Causes for Failures in Treatment of Chronic Joint Diseases and Some Suggestions How Greater Successes Can Be Attained. H. W. Marshall, Boston.
79 Open-Air Treatment in Tuberculosis. J. Lee, Boston.
80 Open-Air Rooms in Springfield. R. B. Ober, Springfield, Mass.
81 Open-Air Rooms. H. D. Chadwick, Westfield, Mass.
82 Maintenance of Isolation Hospitals. W. C. Hanson, Boston.
83 What Happens to Patients Released from State Sanatoria. A. S. MacKnight, Fall River, Mass.
84 Relation Between State and Local Health Authorities. F. G. Curtis, Newton, Mass.
85 Work Treatment for Consumptives. A. T. Cabot, Boston.
86 Fracture of Greater Tuberosity of Humerus by Muscular Action in Child. W. P. Coues, Boston.

*June 6, CLXVI, No. 23, pp. 835-874*

87 Method of Science in Clinical Training. J. H. Pratt, Boston.
88 Hastening of Wound Healing by Means of Skin Grafting and Use of Certain Organic Coloring Matters. J. S. Davis, Baltimore.
89 Chronic Interstitial Nephritis. Acute Indigestion as Important Symptom. M. Seymour, Boston.
90 *Post-Typhoid Dyspepsia. A. Bassler, New York.
91 *Causes for Failures in Treatment of Chronic Joint Diseases, and Some Suggestions How Greater Successes Can Be Attained. H. W. Marshall, Boston.

78 and 91. **Failures in Treatment of Chronic Joint Diseases.**—Speaking of the vaccine treatment for chronic joint conditions Marshall says that in order to gain desired therapeutic effects with vaccines of increased antagonistic qualities in the blood toward specific microorganisms, tissue cells must be irritated by such bacterial poisons; and it seems rather severely taxed in chronic disease in order to get reactions sufficiently great to overcome the resistant bacteria. Microorganisms of chronic diseases are survivors of previous engagements with their host, and have intrenched themselves in the tissues; so that there are dangers of overstimulating the latter, and exhausting their vitalities to a very harmful degree without eradicating the invading parasites. Failures of vaccine treatments, therefore, occasionally presumably mean subsequent accelerations of growth of the microorganisms that are present, and these periods of increased multiplication of bacteria perhaps wouldn't have occurred if vaccines had not been used.

When dealing with vital resistances of tissues that cannot be estimated accurately or quickly and when bacterial parasites are known to have high resistances, Marshall believes that it is wiser to cling to measures of hygienic character that are less likely to do harm if they do no good. It seems safer to influence favorably all normal processes within the body, known and unknown ones, through hygienic combinations than to gain desired results by incompletely understood specific irritants; by toxic substances that may have additional harmful effects, unrecognizable at first, in addition to the properties for which they are administered. He admits.

however, that there are slow, steady gains at times in affected joints when patients are undergoing vaccine treatments. These gains are due apparently to these measures, but in the hands of less skilful administrators the tissues become fatigued and tissue resistances are lowered; moreover, skeptics can say that beneficial effects are mainly due to hygienic measures that are simultaneously carried on. Although vaccines have proven their value in some acute diseases, the limits of their applicability have not been well defined yet, and therefore it seems to Marshall better to rely for the present mainly on hygienic measures in chronic arthritis.

The following essentials are ones which Marshall believes should be used, not simply remembered as sounding interesting or reasonable: (1) Recollection that hygienic measures are physiologic ones, always applicable to every case, and the only effective treatments for some types of arthritis. (2) That health of joints is a matter of physiologic balance between local joint resistances and external factors acting on them. (3) That avoidance of overdosage and fatigue effects from too many or too frequent applications of remedies is necessary. (4) That over-stimulations and straining of vital resistances from simultaneous applications of several remedies in depleted conditions, when there are several defects to be corrected, also must be guarded against. (5) That proper alternations of rest and stimulation never must be neglected. (6) That sequence of events in personal histories and in development of arthritic lesions must be kept in mind. (7) That no long courses of treatments should be prescribed without first experimentally finding out resistances and reactions of each individual, because these cannot be predicted beforehand with certainty. (8) That one step at a time should be taken in an intelligent way, and accurate observations made of the effects of each step; then the next one determined from judgment of the preceding one. Estimation of the probable significance of the results observed at each step must depend on previous knowledge of the physiologic factors known to control health of joints.

90. **Post-Typhoid Dyspepsia.**—In 472 cases seen by Bassler there were 132 instances in which various diseases and conditions were connected with the history in certain suggestive, causative ways. Of these, there were twenty-four instances of typhoid; seventeen of appendicitis and ten of pneumonia. There were four who had had typhoid, appendicitis and pneumonia closely enough associated that differentiation was not possible; and seventy-six cases with other states not considered in this article.

In analyzing these histories it is apparent that in fifteen instances of typhoid the dyspeptic symptoms began within two years after the attack. In six, the beginning dyspeptic symptoms closely followed the fever and had continued with an average duration of the dyspeptic history of over eighteen years. In nine, the dyspeptic symptoms began within two years following the attack of the fever, with an average duration of the continuation of a dyspeptic history of eleven years and six months. Averaging these, it is seen that in the fifteen cases which began with dyspeptic symptoms following the typhoid in a short space of time, to consider a connection between them, the average duration of the dyspeptic history at the time the cases were seen by Bassler was fourteen years and nine months, and that in twenty-four instances of typhoid fever states of chronic dyspepsia followed in 62½ per cent. In the thirteen unoperated cases in which a definite diagnosis of appendicitis had been made at some time previous, states of dyspepsia closely enough associated with the history of appendicitis to be considered in any causative way existed in only six cases, a percentage of slightly over 30, about half of that following typhoid. It therefore seems that states of chronic indigestion follow typhoid twice as frequently as disease of the appendix.

In the pneumonia cases, there was no instance shorter than three years after, at which the dyspeptic symptoms began, and this entire set of cases is considered as having no etiologic connection with dyspepsia.

In these cases, 307 analyses of the urine were made for the typhoid bacilli and in none of them were they found, although the colon bacillus was regularly found present in one case. Of twenty-nine Widal tests of the blood not one gave a reaction that could be considered positive in a diagnostic way. Leucocyte counts were made in all, and in none was this distinctive in any way.

In the six cases in which the typhoid bacillus could not be obtained from the stools, other diagnoses were apparent to account for the dyspeptic symptoms. In five of these, chronic excessive putrefaction in the intestine due to a high content of the *B. coli communis* was apparent. In four of the six cases that were probably chronic gall-bladder infections, a definite tenderness to deep pressure existed in the region of the gall-bladder, although none had any demonstrable enlargement or firm feel to the liver. In three that seemed to be infectious in the intestines, no local tendernesses could be elicited. In all of the nine cases the history of more or less headaches was a feature, and several complained of attacks of "biliousness," these coming on at intervals of every few weeks in the beginning of their dyspeptic history, and after that more often. In three the attacks began with an intense headache, followed shortly by nausea and finally vomiting for several hours, the whole seizure lasting about a day. A feature with all of them was a shortage of ability to withstand mental effort or physical strain. All of the patients in whom the typhoid bacilli were recovered from the stools claimed that they had not had the dyspeptic symptoms before their attacks of typhoid.

### Iowa Medical Journal, Des Moines

*May, XVIII, No. 11, pp. 507-556*

92 Poliomyelitis. J. M. Aiken, Omaha, Neb.
93 Malignant Tumors. J. W. Jobling, Chicago.
94 Tonsillar and Adenoid Affections of School Children, Their Dangers and Proper Correction. F. E. V. Shore, Des Moines.
95 School Sanitation and Medical Inspection of Schools. E. E. Dorr, Des Moines.

### Vermont Medical Monthly, Burlington

*May 15, XVIII, No. 5, pp. 105-130*

96 Cancer of Rectum. D. C. Hawley, Burlington.
97 Small-Pox and Vaccination. H. A. Ladd, Burlington.
98 Some Methods of Laboratory Diagnosis. G. Parmenter, Montpelier.

### Journal of Tennessee State Medical Association, Nashville

*May, V, No. 1, pp. 1-48*

99 Brief Review of Medical Progress. C. J. Broyles, Johnson City.

### Ophthalmic Record, Chicago

*May, XXI, No. 5, pp. 229-271*

100 Brochure on Trachoma. D. W. White and C. E. Treibly, U. S. Army.
101 Treatment of Corneal Ulcers. C. Wray, London, England.
102 Single Rupture of Choroid Involving Half Circumference of Eye-Ball. F. C. Todd, Minneapolis.

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## FOREIGN

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

### Medical Press and Circular, London

*May 8, XCIII, No. 3869, pp. 475-500*

1 Pruritus Vulvæ: Its Etiology and Treatment. R. A. Gibbons.
2 Pseudovomiting. A. Mathieu.
3 Continuous Counterirritation. W. J. Middelton.
4 Few Therapeutic Points. H. French.

*May 15, XCIII, No. 3870, pp. 501-524*

5 *Albumin Test of Expectoration in Tuberculosis (Roger's Reaction). J. Levy-Valensi.
6 Tea-Poisoning. N. Nelid.
7 Pathology of Interstitial Keratitis in Trypanosomiasis and Syphilis. W. Yorke.
8 National Insurance Act and State Medicine in Ireland. R. J. Rowlette.

5. **Albumin Test in Tuberculosis.**—Levy-Valensi agrees with Roger that in all cases of acute or chronic pulmonary tuberculosis (with the exception of granulia), the sputum at all stages contains albumin. The albumin test yields trustworthy information earlier and more constantly than bacteriologic examination. It affords indications more constantly and more certainly than methods based on the use of tuberculin and enables us to detect the tuberculous nature of certain affections of the respiratory apparatus, viz., bronchitis, emphysema, pleurisy, etc. Every subject who presents albumin

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in the sputum is not necessarily tuberculous, but there is great probability of his being so, provided we have excluded pneumonia, bronchopneumonia, pulmonary edema, gangrene, cardiopathies and renal affections.

### Lancet, London

*May 18, XX, No. 20, pp. 1319-1386*

9 Tuberculosis of Conjunctiva: Its Etiology, Pathology and Diagnosis. J. W. H. Eyre.
10 Myeloid Leukemia, Chronic and Acute. P. N. Panton.
11 Treatment of Rodent Ulcer by Carbon Dioxid Snow. E. R. Morton.
12 Intense Neuralgic Pain in Arms After Childbirth. A. C. Geddes.
13 Cystitis and Urinary Antiseptics. C. Williams.
14 *Treatment of Cancer with Selenium. C. E. Walker.
15 Sterile Abscesses Following Use of Tuberculin. D. Forbes and C. Banks.
16 *Hemo-Renal Index. O. Grünbaum.
17 Preparation of Bronchitis Vaccine: Method of Rapidly Obtaining a Pure Culture from Sputum. W. E. M. Armstrong.
18 Health of Europeans in West Africa. A. E. Horn.

**14. Selenium in Cancer.**—Experiments with preparations of selenium were carried out in the Research Department of the Glasgow Cancer Hospital by Walker. Mice and rats with grafted malignant growths of various sizes have been absolutely unaffected by intravenous injections of colloidal selenium, except that they have turned pink within thirty seconds or a minute of the injection, and their excreta have been pink for two or three days. Wassermann's preparation was highly toxic. The colloidal selenium, with or without eosin, is non-toxic. Walker has injected 0.25 c.c into mice and 1 c.c. into rats without any ill-effects. It must be realized in this connection that 0.25 c.c. in a mouse corresponds roughly to 700 c.c. in a man. No effect whatever was produced on the tumors in either mice or rats. Walker found that colloidal selenium is not toxic to monkeys. On the other hand, selenium dioxid is highly toxic. In mice 0.001 gm. causes death in a few minutes. It would appear, then, that colloidal selenium cannot be the substance used by Wassermann, as his preparation is highly, but apparently irregularly, toxic.

**16. Hemo-Renal Index.**—The quantity of inorganic salts in the urine in the normal individual taking ordinary mixed diet is approximately twice the quantity contained in the blood. The ratio of the quantity of inorganic salts in the urine to the quantity of inorganic salts in the blood goes by the name of the hemo-renal index. With suitable apparatus the time taken to determine the index is less than five minutes. For the last five years Grünbaum has used the following method: The fluid, the electric resistance of which is to be estimated, is placed between two disks fixed about 1 mm. apart. These disks consist of pieces of ebonite 1 cm. in diameter, into the center of which is inserted a disk of platinum 3 mm. in diameter. The platinum is connected by a piece of metal with the columns supporting the pieces of ebonite. The platinum is covered with platinum black by running a small current, produced by a difference in potential of three to four volts, from one disk to the other while they are immersed in a solution consisting of platinum chlorid, 1 gm.; lead acetate, 0.008 gm., and distilled water to 22 c.c. The direction of the current is altered every half minute, and the total time is four minutes. The fluid is held between these disks by capillary attraction. An experiment to show that no error is introduced by varying the quantity of fluid in the cell is shown by the following readings, which were obtained with a solution of salt approaching normal saline: 20 c.mm. of the solution, 70 ohms.; 30, 40, 50, 60, 70, 80, 90 and 110 c.mm., in each case 36 ohms. The last reading was after a drop had fallen from the cell. There are several details that are essential in collecting the blood and the serum, and without due attention to these the hemo-renal index is valueless. For convenience these may be tabulated: 1. The patient must be on the ordinary mixed diet, and not on one specially designed for disease of the kidneys, which is usually poor in sodium chlorid contents. 2. The patient must not take any large quantity of fluid shortly before the samples are collected. 3. The sample of urine and a sample of serum must correspond; that is taken between 11 and 12 o'clock; then the sample of blood must be taken at 1 o'clock. Inattention to these details has led to results which have proved fallacious.

### British Medical Journal, London

*May 18, 1, No. 2681, pp. 1109-1164*

19 *Teaching of Anatomy. A. C. Geddes.
20 *Pyelonephritis of Pregnancy. H. R. Andrews.
21 Etiology of Excessive Vomiting of Pregnancy. J. H. Martin.
22 Fever in New-Born Infant. E. Cautley.
23 *Functional Derangement of Liver. W. Bain.
24 Congenital Absence of Colon. J. Morton.
25 Simple Hemoglobinized Saline Culture Medium for Growth of Leishmania and Allied Protozoa. R. Row.
26 Four Cesarean Sections. G. F. Aldous.
27 Mechanism and Treatment of Shock. H. T. Gray and L. Parsons.

**19. Teaching Anatomy.**—Two questions are put to the clinicians by Geddes: 1. Would it not be a great help to students if all clinical teachers took the trouble to learn at least one recognized name for each structure in the body, instead of making use of local or fancy names that are not to be found in any standard work? 2. Would it not be a great help to students if all clinical teachers were quite sure that the structures they describe at great length are of importance, and in fact really exist? Though pedagogic anatomy is dying, it was full of vigor a short time ago, and some of the things that the clinicians of to-day learned yesterday when they were students were purely pedagogic in origin. Some clinical teachers badger students about wretched little pseudo-anatomic pedagogic points, and suggest that any student who does not know these alleged facts knows no anatomy. After two or three attempts to find what his clinical teacher has described as an essential and a touchstone of knowledge, the student's growing skepticism blossoms into certainty that the clinician was simply talking, and another teacher's reputation vanishes in a blaze of blasphemy.

**20. Pyelonephritis of Pregnancy.**—Andrews agrees with other clinicians that the treatment of pyelonephritis of pregnancy should be as conservative as possible. The general treatment consists of rest in bed, milk diet with plenty of harmless fluids to drink, and regulation of the action of the bowels. Violent purgation must be avoided as being likely to cause miscarriage. Some authorities advise administration of small doses of calomel, for example, grain 1/6 t.d.s. More special treatment includes administration of diuretics and urinary antiseptics, alteration of the reaction of the urine, etc. Diuresis is secured by administration of infusion of buchu and sometimes by digitalis. The most popular urinary antiseptic is hexamethylenamin, of which grains xv to xxx may be given daily. As the organisms are growing in an acid medium the urine should be rendered alkaline or neutral. This is done by administration of potassium citrate, grains xx to xxx t.d.s., or of alkaline waters. Results of vaccine treatment are disappointing, at any rate in acute cases. Pain is treated by warm applications to the loins, and if necessary to the abdomen, by administration of tincture of hyoscyamus m. xxx t.d.s., and by posture. Sometimes great relief is obtained by having the foot of the bed raised one or two feet, while in other cases a sitting posture may be found to give relief. As a rule the pain soon yields to treatment. Interruption of pregnancy should be avoided if possible, and expectant treatment always given a fair trial. If both kidneys are affected, and the condition does not yield to medical treatment, and the patient's general condition is going from bad to worse, it may be necessary to empty the uterus.

**23. Functional Derangement of Liver.**—The chief causes of functional derangement of the liver are summarized by Bain as follows: Dyspepsia, gastro-intestinal disturbance, alcoholic excess, rich and highly-seasoned food, fevers, nervous influences and residence in the tropics. The best method of treatment is to diminish the amount of work the liver has to perform and to facilitate the circulation through it. There must be a limitation of the food supply; but it must be the nutrition of the liver cell, and thereby injuriously affect its activity. A mixed diet is the best, the articles being of simple composition. Three meals a day are advised unless the gall-bladder is involved. Carbohydrates and fats should be limited, as the former tend to ferment, and the latter are not easily absorbed if the quantity of bile excreted is diminished. Alcohol should be forbidden. Other irritants such as mustard, pepper, red pepper, horseradish, ginger, cloves, strong meat

broths, large quantities of salt and the empyreumatic substances that are formed in baking and roasting should be avoided. In most cases it will not be necessary for the patient to exercise dietetic self-denial for more than a week. Rest after meals should be enjoined so that the functional hyperemia of the organ is not disturbed. Exercise such as golf is very important. With increased respiratory effort the liver is rhythmically compressed, and the venous blood flows more rapidly to the heart. For those unsatisfactory individuals who take little or no exercise, massage, general and special, is desirable.

### Archives Générales de Médecine, Paris

*April, XCI, No. 4, pp. 293-384*

28 *Deafness of Nasal Origin and Treatment by Reeducation. (Les surdités d'origine nasale et leur traitement rééducateur.) A. Maurice.
29 Spa Treatment of Asthma. (Traitement hydro-minéral de l'asthme.) Debidour.
30 Pathogenesis of Chronic Bronchitis. (Bronchites chroniques et affections des grands systèmes organiques.) Flurin.

28. **Deafness of Nasal Origin.**—Maurice says that a specialist for the ear must first of all specialize on the nose, as three-fourths of all ear affections are in the middle ear (582 of his 772 ear patients). Anything causing a tendency to obstruction in the nose favors development of otosclerosis. Congestion and hypertrophy of the mucosa of the eustachian tube is liable to spread up into the ear and involve the ossicles in the exuberant tissue. The deafness traceable to a nasal affection requires both medical and surgical measures. Every trace of adenoid tissue must be removed and conditions in the nose restored to normal. The membrane of the tympanum and the ossicles must be mobilized and reeducated and, Maurice has devised for this an apparatus, the kinesiphone, which produces from 100 to 4,000 sound waves a second, like those of the human voice, but magnified enough to exert a massage-like action on the hearing apparatus stimulating the circulation and phagocytosis while training the ear to hear more and more acutely. The aim is to mobilize and reeducate an organ which is beginning to grow torpid, rigid and paralyzed. It is roused to new life and functioning by this massage and reeducation by means of regular sound waves of the same length as those of the human voice. But, he adds, "don't wait until the house is all burned down before sending for the fire department."

### Archives des Maladies de l'App. Digestif, Paris

*April, VI, No 4, pp. 181-240*

31 *Sensitiveness of the Colon to Motor Stimulation from a Distance. (De l'excitation à distance de la motricité colique.) H. Surmont and A. Dubus.
32 *Abnormally Small Stomachs. (De la microgastrie.) R. Glenard and F. Jaugeas.

31. **Motor Reactions in Colon to Stimulation from a Distance.**—Surmont and Dubus report extensive experimental research, with a number of tracings, all showing the extreme sensitiveness of the colon to stimuli from distant organs, electric, mechanical, etc. Their findings throw light on the mechanism of constipation, revealing the inhibiting influence on peristalsis from irritations at remote points. One example is the spastic constipation of nasal origin which subsides completely when the turbinate bones are cauterized. The stimuli acting on the colon may come from the upper part of the digestive tract, from the gall-bladder, genital organs, peripheral nerves or mucous membranes, or may even be of purely emotional origin. By careful search for the primary source in every functional or catarrhal affection of the colon, it may be possible to determine their secondary nature and cure by removing the cause when everything at first seemed to point to the colon as the primary and sole organ involved.

32. **Abnormally Small Stomachs.**—In twenty-seven cases in which radioscopy revealed an unusually small stomach, the organ was naturally small with compensating hypertrophy in two cases; in five the stomach had shriveled and shrunk on account of plastic linitis, and in the others the small size was due to adhesions or deformity from various causes. The retraction at a certain point may correspond to symptoms suggesting a neoplasm.

### Archives des Maladies du Cœur, Etc., Paris

*May, V, No. 5, pp. 305-368*

33 *Hypertrophy and Dilatation of the Heart. (Etude sur l'anatomie pathologique du cœur.) S. Widerøe.
34 Endocarditis Nearly Obliterating Left Ventricle. (Endocardite infectieuse pariétale du ventricule gauche oblitérant la plus grande partie de sa cavité.) E. Lenoble and J. Quelme.
35 Chronic Lymphatic Leukemia. (Leucémie lymphatique chronique; lymphomes mesentériques; reaction myéloide du sang et des organes.) H. Esbach and J. Bauer.
36 Mechanism of Reduplication of Second Sound with Mitral Stenosis. (Sur le mecanisme du rythme à trois temps de la sténose mitrale.) C. Pezzi and R. Lutenbacher.

33. **Pathologic Anatomy of the Heart.**—Widerøe reports the findings on examination of the hearts from 311 cadavers, illustrating the way in which the heart stretches and hypertrophies in various pathologic conditions, chronic nephritis, pulmonary tuberculosis, etc. The extent of the changes observed is sometimes astonishing but still more amazing is the way in which the heart often adapts itself to these new conditions. Different diseases influence the heart as a rule in a characteristic manner.

### Archives de Médecine des Enfants, Paris

*May, XV, No. 5, pp. 321-400*

37 *Scarlatinal Lesions in Adrenals and Pancreas. (La surrénalite et la pancréatite scarlatineuses.) L. Tixier and J. Troisier.
38 Gangrene of Leg in Diphtheria. (Cas de gangrène embolique d'un membre consécutive à une angine diphthérique maligne.) E. C. Aviragnet, Blechmann and A. Huber.

37. **Inflammation of the Pancreas and Adrenals in Scarlet Fever.**—Tixier and Troisier review the scanty literature on this subject and then describe in detail the clinical course and necropsy findings in six cases and the clinical course with recovery in four others. Treatment should aim to supply the secretions, the lack of which during the acute inflammation is causing severe symptoms, especially when the adrenals are involved. The symptoms of this are abdominal and cardiovascular, with great prostration. The pain is located in the epigastrium, sometimes accompanied by pain in the lumbar region. The cardiovascular symptoms are tachycardia, abnormally low blood-pressure and tendency to collapse of the heart. These symptoms might also be elicited by myocarditis, but this is comparatively rare in scarlet fever in comparison to the glandular lesions. Asthenia or prostration is also an important sign of adrenal trouble. Treatment should be with epinephrin to remedy the cause. In one severe case in a boy of 10 they gave by the mouth eight drops of a 1 per thousand solution of epinephrin in twenty-four hours, repeating this for six days and the child recovered. The extreme prostration, abdominal pain, pulse of 140 and very low arterial pressure came on the fourth day of what seemed at first mild scarlet fever. In another case a previously healthy girl of 11 had violent fever and delirium three days before the eruption and after its appearance, with tachycardia, a very low blood-pressure and distress in the upper abdomen. She was given sixteen drops of the epinephrin solution, twelve the next day and ten on the following days. A total of sixty-six drops was given at intervals during a month. The child was left with patches of a brownish discoloration on the limbs, abdomen, back and face. The organotherapy gave especially fine results in another case of scarlet fever complicated with diphtheria and streptococcus septicemia. After one dose of adrenal extract the blood pressure rose and under diphtheria antitoxin and other measures the child recovered. In one of the cases reported a persisting white line was left when the finger nail was drawn along the skin of the abdomen. This is generally accepted as a sign of defective adrenal functioning.

### Bulletins de la Société de Pédiatrie, Paris

*April, XIV, No. 4, pp. 153-191*

39 *Chorea and Infection. J. Roux.
40 *Prophylaxis of Measles, Mumps and Chicken-Pox. (La lutte contre les maladies benignes.) Nageotte-Wilbouchewitch.

39. **Chorea and Infection.**—In the case reported by Roux a child of 11 had acute tonsillitis, followed in two weeks by acute mucomembranous colitis which subsided after a week or two. One week later acute chorea developed and became very

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severe in the course of a month; then on this became superposed a subacute articular rheumatism and, later, asthma. The chorea and rheumatism gradually subsided and the child was apparently cured by the end of the month—three months after the first onset of trouble. Roux thinks that a single infection was probably responsible for this train of symptoms, and that there is much evidence to sustain the assumption that an attenuated tuberculous infection was responsible for the whole.

40. **Dangers of Prophylaxis of Children's Diseases.**—A number of extensive and severe epidemics of measles happen to be prevailing just now at various points, and Mme. Nageotte queries whether the modern methods of prophylaxis of children's diseases are not breeding up trouble for the future. She says, "In childhood, measles, mumps and chicken-pox are mild and harmless as a rule, but when children are prevented from acquiring these diseases they grow up non-immune. The stream of infection is confined within artificial dikes but the day comes when the dike gives way at some point, and then the waters spread far and wide, carrying devastation to crowds of adult non-immunes. The prevailing epidemics among adults and children are the result of the efficiency of modern prophylaxis. The number of persons rendered immune by having had the disease has been reduced by artificial means, and the others are defenseless when the infection finds an opportunity to take its revenge." She thinks that the plan of keeping the children of a family out of school when one has measles, chicken-pox or mumps, is, to say the least, of extremely doubtful ultimate advantage.

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### Journal de Chirurgie, Paris

*April, VIII, No. 4, pp. 365-508*

41 *Estimation of Functional Capacity of the Second Kidney when the First is Tuberculous and Catheterization of the Ureters is Impracticable. (De l'appréciation de la valeur du deuxième rein dans la tuberculose rénal en cas d'impossibilité du cathétérisme urétéral.) M. Guibé.

41. **Estimation of Functional Capacity of Second Kidney.**—Guibé reiterates that the first step is, of course, to examine the total kidney functioning. If this is found defective, there is no use in going farther. But if the total functioning is still fairly good, there are great chances for the patient to benefit from removal of the tuberculous kidney. Chromocystoscopy is a valuable aid but should never be relied on exclusively. It may be possible to introduce the catheter into the ureter through a suprapubic transverse incision into the bladder. The bladder is generally involved in the kidney process so that an opportunity for direct local medication may be an advantage rather than a drawback with this method. Another important aid in diagnosis is transient exclusion of the kidney, that is, diverting the urine outward after artificial obstruction of its ureter. When this is done for twenty-four hours a very good oversight of conditions in the other kidney can be obtained. It is important to bear in mind, however, that the other kidney never functionates to its full capacity under these conditions. This technic exposes to the danger of a fistula and it should never be done on the presumably sound kidney, and only when nephrectomy can follow at once if needed.

### Journal de Médecine de Bordeaux

*April 28, XXIV, No. 17, pp. 257-272*

42 Differential Diagnosis of Malarial and Alcoholic Delirum. (Le diagnostic différentiel des délires paludéen et éthylique.) Ilesnard. Commenced in No. 16.

*May 5, No. 18, pp. 273-288*

43 *Case of Hysteric-Traumatic Hemiplegia. G. Bonrepaux.

*May 12, No. 19, pp. 289-304*

44 Post-Mortem Delivery. J. Pery.

43. **Hysteric Traumatic Hemiplegia.**—In the case reported a man of 26 gradually developed the hemiplegia after a bag of coal had fallen on him. There was no bruise on his head nor bloody discharge from the ear and the face was not involved in the hemiplegia. None of the signs of organic hemiplegia were present except Babinski's sign. This was pronounced, and was the only discordant note in the syndrome of functional hemiplegia. The paralyzed limb always felt colder than the other side, and the patient perspired more on the sound side.

### Revue de Médecine, Paris

*May, XXXII, No. 5, pp. 392-416*

45 Disturbances in Nutrition in Dog After Partial Removal of Pancreas. II. (Recherches sur la dépancréation.) H. Labbé.

### Semaine Médicale, Paris

*May 22, XXXII, No. 21, pp. 241-252*

46 Postoperative Thrombophlebitis Not Necessarily of Septic Origin. (Les thrombophlébites post-opératoires sont-elles de nature septique?) F. Moty.

### Berliner klinische Wochenschrift

*May 13, XLIX, No. 20, pp. 925-972*

47 Importance of Training Medical Students in Psychiatric Diagnosis. (Bedeutung der psychiatrischen Untersuchungsmethodik für die allgemeine ärztliche Ausbildung.) K. Bonhoeffer.

48 Changes in the Pancreas with Diabetes. (Pankreasveränderungen bei Diabetes.) D. von Hansemann.

49 Thorium X in Treatment of Pernicious Anemia and Leukemia. (2 Fälle von perniciöser Anämie und Leukämie mit Thorium X behandelt.) J. Plesch.

50 Death After Treatment with Thorium X. (Zur Frage der Vergiftung mit Thorium X.) F. Gudzent and W. Ilis.

51 Mesothorium in Cancer. (Zur Mesothoriumtherapie bei Krebskranken.) A. Pinkuss.

52 Technic for Inhalation of Radium Emanation. (Ueber die Technik des Nachweises der Anreicherung der Radiumemanation im Blute bei deren Einatmung.) W. Marckwald.

### Deutsche medizinische Wochenschrift, Berlin

*May 16, XXXVIII, No. 20, pp. 929-976*

53 *The General Practitioner and Foreign Bodies in the Air Passages. (Diagnose und Behandlung der in den Luftwegen befindlichen Fremdkörper.) W. Brünings.

54 Improved Technic for Cultivation of Spirochaeta Pallida. (Vereinfachte Culturmethode der Spirochaeta pallida aus menschlichem Material.) G. Arnheim.

55 Immunization Against Tuberculosis. (Ueber die Resistenzerhöhung gegen Tuberkulose nach dem heutigen Stand der Immunitätsforschung.) J. Citron.

56 Roentgenotherapy of Myomas. B. Krönig and K. Gauss.

57 Localization of Disease in the Cerebellum. (Die Lokalisation der Kleinhirnerkrankungen.) R. Bing. Commenced in No. 16.

58 Salvarsan and General Paresis. (Salvarsan und Paralyse.) L. Meyer.

59 *Injury of Eyes from Watching Eclipse of the Sun. (Augenschädigung durch Beobachten der Sonnenfinsternis.) W. Feilchenfeld.

53. **Foreign Bodies in the Air Passages.**—Brünings remarks that since the introduction of bronchoscopy the number of foreign bodies found in the air passages has jumped from nineteen in 1900 to 595 in 1911. Certain towns are becoming foci for swallowed and inhaled foreign bodies. As it is absurd to suppose that foreign bodies are being aspirated or swallowed more numerously now than in former years, the deduction is evident that many obscure and wasting affections in the past have been merely the reaction to the presence of an unsuspected foreign body in the air passages or alimentary canal. The fate of the patient depends on whether the physician first consulted thinks of the possibility of a foreign body as responsible for the disturbances observed; they may not suggest anything of the kind and there may be nothing in the history of the case to suggest it. Even if he thinks of this possibility, the physician may shrink from advising bronchoscopy—a prominent surgeon is quoted as having said quite recently that it is a method worthy of admiration but not of imitation, while Brünings insists that it should be applied even on mere suspicion of a foreign body. Over half the cases on record are in children under 5, and the majority are large single bodies, 80 per cent. lodging on the right side, and thus most easily inspected with the bronchoscope. In 1,064 cases compiled from the literature only 20.5 per cent. were spontaneously coughed out, while the mortality in 770 cases was 52 per cent. Brünings thinks that even these figures are far below the reality as countless cases are not published and as still more are never diagnosed. In the esophagus the foreign body does not cause coughing, while in a bronchus there is no pain or interference with swallowing, but there is generally considerable coughing at first or constantly, and there may be more or less suffocation, but the latent phase is especially important as the physician generally sees the patient thus first, and he is liable to be misled by the lack of symptoms. Even if a bronchus is obstructed by a swollen bean, for example, there may be no dyspnea, the other lung acting vicariously for both without attracting subjective attention to its extra work, but palpation will show the vocal fremitus on the side affected materially reduced and accumulation of secretions leads to increasing dulness. Small objects, like a needle, may cause

absolutely no symptoms from their presence, except possibly a reflex restriction of the respiratory movements on the side involved. This is easily detected from a position back of the seated patient looking along the profile of his chest about at the nipple line. When the patient reclines on a table and a cane is laid across his chest, the cane dips down on the side that does not share equally in the excursions of the chest wall. With sound lungs, the main bronchus may be obstructed to a fourth of its normal lumen during the first latent phase without any physical signs from it, even the reduced excursions of that side of the chest being apparent only during very deep breathing. Adults can attend to business and children go on playing without disturbance until some change of position of the foreign body may bring on a sudden spasmodic cough or suffocation. Roentgenoscopy and endoscopy are thus indispensable in many cases in this latent stage, especially in children, although the former is generally useless unless the foreign body is of metal. Direct visual inspection has failed only twice in the last 291 cases on record, and the foreign body was removed by this means in all but 4.5 per cent., Brünings says, insisting that this is the only absolutely reliable means for diagnosis and effectual treatment. Endoscopy requires no preparation or general anesthesia and in skilled hands is entirely free from danger. It does no harm to use the bronchoscope to confirm a diagnosis by exclusion. In many such cases he has been surprised by the discovery of a foreign body. The earlier the bronchoscopy is done the less interference from inflammatory reaction. Bronchiectasis and putrid secretions, pleurisy and pneumonia are liable to develop later from the irritation and the obstruction. Every case of circumscribed processes of the sort should suggest a possible foreign body, especially when in the lower lobe and no tubercle bacilli or elastic fibers can be found in the sputum. At any stage, however, endoscopy may prove possible and important. He describes his technic for bronchoscopy with illustrations of the instruments he has devised for the purpose. (Some recent articles on bronchoscopy were published in THE JOURNAL, pp. 467 and 692).

59. **Injuries of the Eyes During the Eclipse.**—Feilchenfeld states that the weather was so clear during the eclipse of the sun in April that many persons had their eyes injured by watching it without due protection. He reports a number in which the disturbances were so severe that the individuals applied for medical aid. The macula showed evidences of intense congestion for a time but no permanent injury seems to have resulted in any instance.

### Medizinische Klinik, Berlin

*May 19, VIII, No. 20, pp. 809-856*

60 Nervous Vomiting. (Ueber nervöses Erbrechen.) L. Kuttner.
61 Balneotherapy of Chronic Cardiovascular Disease. (Balneotherapie der chronischen Herz- und Gefässkrankheiten.) I. Groedel (Nauheim). Concluded in No. 21.
62 Symptomatology and Etiology of Infantile Scurvy. (Barlowsche Krankheit.) B. Bendix.
63 Experiences with Sunlight in Treatment of Surgical Tuberculosis. (Beitrag zur Heilstättenbehandlung der chirurgischen Tuberkulose.) M. Jerusalem.
64 Importance of Under-Pressure Breathing in Treatment of Cardiovascular Disease. (Bedeutung der "Unterdruckatmung" in der Behandlung von Kreislaufstörungen.) O. Bruns.
65 Continuous Flushing of the Large Intestine in Treatment of Acute Dysentery, Etc. (Zur Therapie akuter Dickdarmerkrankungen.) W. Raschofszky.
66 Microscopic Flora in Impure Drinking Water. (Ueber die pflanzlichen Leitorganismen der Wasserverunreinigung.) W. Wangerin.
67 Treatment of Cerebral Hemorrhage. (Behandlung der Apoplexie.) R. Bing.

### Münchener medizinische Wochenschrift

*May 14, LIX, No. 20, pp. 1081-1136*

68 *Artificial Fecundation. (Ueber künstliche Befruchtung.) A. Döderlein.
69 Arsenic Deposits in Uterine Glands as Cause of Menstruation. (Die arsenspeichernde Funktion der Uterindrüsen als Ursache der Menstruation.) M. Imchanitzky and J. Ries.
70 Hypersusceptibility as Factor in Infection and Immunity. IV. (Rolle der Ueberempfindlichkeit bei der Infektion und Immunität.) A. Schittenhelm and W. Weichardt.
71 Toxin Production from Action of Serum on Organ Extracts. (Giftbildung durch Einwirkung von Blutserum auf art- und körpereigene Organextrakte.) M. Ascoli and G. Izar.
72 *Serodiagnosis of Tumors by Complement Fixation Tests. II. (Ueber Serodiagnostik der Geschwülste mittels Komplementablenkungsreaktion.) E. v. Dungern.
73 Nature of Serum Reaction in Syphilis. (Experimentelle Beiträge zum Wesen der Wassermann-Neisser-Bruckschen Reaktion.) S. Bergel.
74 *Action of Heart and Kidney Tonics with Diseased Kidneys. (Wirkungsweise von Nieren- und Herzmitteln bei nierenkranken Menschen.) M. Hedinger.
75 Ring Scotoma from Watching Eclipse of Sun. (Ueber Ringskotome durch Blendung anlässlich der letzten Sonnenfinsternis.) A. Jess.
76 Limits of Accuracy of Electric Tests of Urine. (Versuche über die Genauigkeitsgrenze der galvanometrischen Bestimmung von Elektrolyten und Harnstoff im menschlichen Harn.) Wunder.
77 Individual Susceptibility of the Skin to the Roentgen Rays. (Zur Frage der individuellen Empfindlichkeit der Haut gegen Röntgenstrahlen.) Thedering.
78 Benefit to be Expected from Operative Treatment of Congenital Coxa Vara. (Was kann man bei angeborener Coxa-vara auf blutig operativem Wege erreichen?) A. Mendler.
79 Case of Transient Collapse Under Hormonal. (Unerwunschte Nebenwirkungen der Hormonaltherapie.) W. Wolf.
80 Prescribing of Hydrogen Dioxid. (Ueber Verordnung von Wasserstoffsuperoxydlösungen.) P. Fischer.

68. **Artificial Fecundation.**—Döderlein reports a clinical case, the only successful one of six in his experience, and discusses the preferable technic.

72. **Serodiagnosis of Cancer.**—Dungern describes the method with which he has been able to distinguish the serum of patients with cancer, on principles similar to those of the Wassermann reaction. No reaction was obtained in over 200 cases of affections other than cancer, while the reaction was constantly positive in all but seven of 100 cancer patients.

74. **Research on Action of Heart and Kidney Tonics with Kidney Disease.**—Hedinger found that in various forms of nephritis the action of the heart and kidney remedies was directly dependent on the condition of the vessels in the kidneys, exactly as in experimental toxic nephritis.

### St. Petersburger medizinische Zeitschrift

*May 14, XXXVII, No. 9, pp. 135-146*

81 No Benefit from Salvarsan in Leprosy. (Sollen Leprakranke mit Salvarsan behandelt werden?) A. Paldrock.

### Therapeutische Monatshefte, Berlin

*May, XXVI, No. 5, pp. 209-264*

82 *Reform in Advertising of Proprietary Medicinal Articles. (Eine Reform im Arzneivertriebe.) W. Heubner.
83 *Objectionable and Unobjectionable Advertisements in the Medical Press of Germany and Austria. (I. Arzneimittelliste des Deutschen Kongresses für Innere Medizin.) F. Penzoldt, R. Gottlieb, W. Heubner, G. Klemperer and A. Schmidt.
84 *Young Infants in Institutions. (Säuglingspflege.) S. Engel.
85 Methyl-Alcohol Poisoning. (Methylalkoholvergiftung.) O. Schmiedeberg.
86 *Paracentesis from the Rear in Pericarditis. (Eine Modifikation der Herzbeutelpunktion.) H. Curschmann.
87 Diet Without Milk in Children with Spasmophilia. (Ueber die Durchführung einer milchlösen Kost bei Spasmophilie—Krampfbereitschaft.) W. Raabe.
88 *Eclampsia. (Zur Behandlung der Eklampsie.) Volland.
89 Calcium Salts in Treatment of Asthma, Hay Fever and Allied Conditions. R. Hoffmann.

82-83. **Reform in Advertising Medicinal Articles.**—The organized internists of Germany at the annual meeting in April appointed a committee to examine the advertisements of proprietary medicinal articles and foods that had appeared in twenty-one of the leading German and Austrian medical journals during 1911, for the purpose of detecting false, misleading or exaggerated statements of their therapeutic or other value. The work of the committee was exclusively the examination of the statements in the advertisements; no attempt was made to examine the chemical composition of the articles in question. The committee adopted certain rules to govern the listing of the remedies, as already described in THE JOURNAL, May 25, 1912, p. 1613. The *Monatshefte* publishes the entire list of remedies and food preparations the advertising of which appeared to comply with the rules adopted. The list is also published of the remedies and food preparations the advertising of which failed to rule up to the standard. In a third list are given those which are dubious, that is, the committee does not feel qualified to pass judgment without further investigation which is not within the province of the committee to undertake. The three lists, "positive," "negative" and "dubious," fill six pages and include also salves and other medicinal vehicles, serums and vaccines, mineral waters, artificial carbonated and oxygenated baths and radium preparations.

Heubner comments editorially on this as a promising reform in the attitude of the profession to proprietary articles. He says the complaint is frequently heard that the production and advertising of drugs are to a certain extent in hands which are not governed by the same care and faithfulness which

should and do inspire the physician. There are a large number of therapeutically worthless preparations on the market which represent a serious injury for practical therapeutics. The life career of each one of the preparations of this kind is limited—on account of its therapeutic inefficiency—but the inexhaustible production of new ones keeps increasing the total. There is also a large number of proprietary articles on the market which are different from what is claimed for them, and they are thus presented under false statements. They may have a great vogue for a long time because they are really therapeutically effectual; only the same results have long been obtained with the same effectual substances in some other guise and generally at far less expense. They represent a burden and disturbing element for the physician in so far as he is misled to ascribe to them new therapeutic possibilities, when in fact none such exist, and for the patient they represent a useless and unnecessarily increased expense. Another group of pharmaceutical preparations are unessential modifications of official substances and their action is woefully exaggerated to set them in some special light or influence opinion in regard to them in some way contrary to the true facts. Competition between manufacturers also leads them to put on the market substances closely allied to those of well established reputation, presenting them as new remedies with specially favorable properties, although it is one of the oldest pharmacologic experiences that substances of closely similar chemical composition have also closely similar actions.

Heubner calls attention in particular to the length of the "dubious" list, that is, those remedies in the advertising of which the committee was unable to decide without more extensive investigation whether they complied with the rules or not. This "dubious" list includes bormonal, pertussin, scopomorphin, endotin and sanatogen among the more familiar names. Heubner remarks that the existence of this list shows how extremely difficult it is to determine the status of a remedy even according to a few definite requirements which manifestly represent only an indispensable minimum. "The need for some place for independent scientific investigation of new medicinal articles, especially in regard to their chemical composition, is here felt most strongly. The three lists of the Kongress für Innere Medizin are to be published again at regular intervals, and this is a promising beginning. We have now a basis for judgment of the advertisements of proprietary preparations, and the publishers of medical journals will thus be enabled to keep their advertising columns free from the grossest frauds." (See Editorial, page 1860.)

84. **Institutional Care of Young Infants.**—Engel discusses the reasons why as a rule infants thrive so much better in the home than in institutions. Among the points he brings out are that prematurely born infants almost invariably improve and thrive better than others, and he is inclined to ascribe this to the fact that such infants require and receive an exceptional amount of care. He thinks the psychic factor is of not much moment; more important is the lack of quiet. The children do not sleep so sound and are readily awakened by the sights and sounds in an institution, so that if they are inclined to be nervous this tendency is aggravated. He reports research on the number of times infants urinate. He fastened on the child a small urinal with electric connection so that each time any urine was voided it rang a bell as it passed into a jar below. The attendant then recorded the amount and the hour. He found that average infants, with an intake of about 800 c.c. of fluid, urinated from twenty-five to thirty times in the course of twenty-four hours, and with twice this amount of fluid ingested, urinated fifty or sixty times or more. He gives diagrams showing the connection with sleep and feeding. Infants up to a few weeks old, which sleep most of the time, void urine at approximately regular intervals, asleep or awake, but at six months and over only when they are awake, as a rule. These findings show the impossibility of keeping the child constantly dry, and the advantage of having it dry as it is about to drop asleep. When dry and comfortable it sleeps quietly and utilizes the assimilated food much better. Some recent research on the influence of crying on the respiratory metabolism of infants showed that one two-months-old child at rest consumed 10.86 gm. of oxygen and produced 12.12 gm. of carbon dioxid. When the child cried, these figures increased by 44 and 59.4 per cent. This corresponds to an effort of 1637 mkg. done by a child weighing only 2¾ kg. This example teaches how important purposeless movements are for the metabolism of an infant, and the necessity for avoiding useless emotions and movements and the benefit of comfort and rest. In conclusion he compares conditions for infants in institutions and the home to tropical plants brought into a cold climate. Plants that in their southern home grow most luxuriantly, in the northern conservatories have to be managed with the extremest care to make them grow. Thought, effort and expense are required to make infants thrive in institutions as they do naturally in the home without such efforts.

86. **Puncture of the Pericardium.**—Curschmann reports three cases calling attention to the good results of puncture from the back. He was driven to this in the first case by the extreme dilatation of the heart following acute rheumatism, and by the excitement of the patient, a nervous girl of 16. He punctured through the eighth interspace from the rear and siphoned out 350 c.c. of effusion; now, six months later, except for slight modification of the first sound at the apex, the heart and circulation seem normal. Convalescence from the pericarditis was retarded by chorea with stupor and hallucinations, all subsiding in three weeks. In the second case, a man of 50 was relieved by puncture from the rear; Curschmann's only trocar was short and wide and he did not like to introduce it too close to the heart. In the third case there was so much edema in the skin of the left chest that he did not dare to puncture through its unknown depth. He cites his father's case in which a man of 32, otherwise healthy, would not allow puncture and died suddenly before he could be persuaded to permit it. Such cases probably are more frequent than generally supposed; puncture from the rear would rob the procedure of much of its terror for the patient. Such effusions are mainly encountered in young persons after acute rheumatism, and the heart is generally much dilated. The puncture should be done between the left nipple and anterior axillary lines, in the sixth or seventh interspace, or from the rear in the eighth interspace.

88. **Eclampsia.**—Volland reports a case of severe eclampsia at term; on the supposition that it was possibly the result of latent uremia, he gave 5 gm. of sodium salicylate in a rectal enema. Intense sweating followed, the mattress becoming soaked, but the convulsions ceased although there was maniacal agitation for four days until the last trace of salicylic acid had disappeared from the urine. He thinks that assumption of edema of the brain would explain the eclampsia in this case and benefit from diversion of the fluid. The case resembles Zangemeister's experience in three cases of eclampsia in which he trephined and found the intracranial pressure extremely high, and two of the patients recovered afterward.

### Wiener klinische Wochenschrift, Vienna

*May 16, XXV, No. 20, pp. 735-782*

90 Viscosity of the Blood in the Tuberculous. (Viskositätsbestimmungen bei Tuberkulose.) M. v. Eisler and M. Laub.
91 *Bismuth Paste in Treatment of Fistulous Tracts. (Fistelbehandlung mit Beckscher Wismutpaste.) M. Sgalitzer. (Wismutintoxikation bei Behandlung nach der Methode von Beck.) S. Erdheim.
92 *Sunlight in Treatment of Surgical Tuberculosis. (Zur Heliotherapie der chirurgischen Tuberkulose und Skrofulose.) W. Spitzmüller and H. Peterka.
93 *Blood-Pressure Reducing Action of Hormanal. (Ueber die Wirkung des Hormonals auf die Darmbewegung.) R. Mohr.
94 Changes in the Adrenals After Roentgen Exposures. (Veränderungen an den Nebennieren nach Röntgenbestrahlung.) A. v. Decastello.

91. **Bismuth Paste in Treatment of Fistulous Tracts.**—Sgalitzer reports the experiences with bismuth paste in von Eiselsberg's clinic at Vienna where it has been applied in eighty cases as an aid in diagnosis or treatment during the last two years. He also reviews fifteen cases on record in which the paste has been applied with resulting intoxication, in eight with a fatal outcome. These mishaps, he says, have occurred exclusively (with the exception of one child) in cases in which the fistulous tracts were in the abdomen or chest, or cases of cold abscesses or tuberculous joint affections; no case of intoxication is on record from the use of the paste in bone

processes with fistulas or fistulous openings into lesions in the soft parts not in connection with any natural cavity. No signs of intoxication were noted at Eiselsberg's clinic except slight brief enteritis in one case. But the therapeutic action did not seem to be durable; of the four patients supposed to have been cured by the paste over a year ago, two have since returned with recurrence of trouble and the others have been lost sight of. At the same time, the benefit from the paste in appropriate cases, Sgalitzer emphasizes, surpasses that realized by any other measures known to date. A number of the patients had their earning capacity restored by the treatment. He adds that a great advantage is that the treatment can be applied in the home by any practitioner; it is advisable to supplement it by special care of the mouth. On account of the susceptibility of children to bismuth, he warns that this treatment should not be applied to a child until after failure of all other measures, and the paste should not be over 10 per cent. strength. Among twenty-two patients in the last six months treated with the paste, two were cured of their soft parts fistulous lesion (one an anal fistula); two were much improved (one a soft parts and one a bone fistula); eight were materially improved including three with anal fistulas and five with bone fistulas, while six with bone fistulas were only slightly improved, and four showed no effect from the treatment. In a third of the patients the temperature rose a little for a day or so, evidently the result of stagnation and absorption of the secretion in the fistula.

Erdheim's experience was less favorable, severe intoxication following injection of 60 c.c. of a 33 per cent. bismuth paste for diagnostic purposes in a boy of 9 with a fistula persisting since an operation six years before for empyema of the right side of the chest. After four or five days, signs of bismuth poisoning developed, a chill and high fever, ulceration and line on the gums, with traces of bismuth in the urine. The fistula was cleared out and the child recovered after nine days of severe symptoms, but the fistula is still unhealed, six months later. Erdheim also reviews the literature on the subject of bismuth poisoning. Fever seems to be the earliest and most constant sign of bismuth poisoning, followed by prostration and headache, and possibly discoloration of the wound, glassy swelling of the granulations and the discovery of bismuth in the urine. It is very important in making the injections to refrain from inflicting new injury, tearing the tissues or forcing the paste into spaces beyond. Brandes does not inject the paste but introduces a catheter filled with it to the bottom of the fistula and fills it up thus from below. Erdheim concludes by urging extreme caution, with carefully selected cases, never forgetting that the results are uncertain and that the method is liable to entail severe injury.

92. **Sunlight in Treatment of Surgical Tuberculosis.**—Spitzmüller and Peterka have been applying heliotherapy as an adjuvant to other measures in treating the children at the public children's hospital in upper Austria. They were unable to detect any marked influence from the sunlight treatment; the children from the Vienna slums threw off their tuberculosis in the pure country air and with the good food, regardless of whether they were given systematic exposures to the sunlight or not. They urge that classified records be kept this coming summer of patients treated by the ordinary measures alone and plus the heliotherapy and by the heliotherapy alone, with care to class the patients according to their former environment, the results of any treatment being far more marked among slum children than in those from the homes of the well-to-do.

93. **Action of Hormonal.**—Mohr states that his experimental research on hormonal has established beyond question its pronounced effect in reducing the blood-pressure even with doses proportionately far below those used in the clinic to date. He had an experience with a threatening collapse in a man of 28 after intravenous injection of 14 c.c. of hormonal, and since then, he says, four similar cases have been reported (Kretschmer, Hesse, Rosenkranz and Frischberg), and Madlener has recently reported the death of a patient after injection of 20 c.c. hormonal for paralytic ileus following a myoma operation. Sabatowski's research on dogs has further confirmed the sudden pronounced drop in the blood-pressure after intravenous injection of hormonal. In Mohr's clinical case referred to above, the blood-pressure before the injection was 125 and afterward 100 Recklinghausen.

### Zeitschrift für Urologie, Berlin

*May, VI, No. 5, pp. 337-459*

95 *Insufficiency of the Bladder Resulting from Atrophy of the Prostate. S. Grosglik.
96 Case of Multiple Submucous Myoma of the Bladder. (Leiomyoma vesicae.) A. Götzl.
97 *Nephrectomy for Cystic Kidney. (Polycystische Nierendegeneration.) G. v. Illyes.
98 *Syphilis of the Bladder. (Zur Frage der Harnblasensyphilis.) M. A. Mucharinsky.

95. **Bladder Insufficiency from Atrophy of the Prostate.**—Grosglik has had twenty-three patients, all over 52, who suffered from chronic incomplete retention of urine with dilatation of the bladder and drizzling of urine at night. There was a history of old gonorrhea in eight cases and of syphilis in three. The prostate was not enlarged in any case, and in all but a few was under normal size, but the disturbances were exactly like those from a hypertrophied prostate. In three cases the bladder was opened and the conditions found at the outlet explained the trouble as the result of a mechanical valve-like hindrance to the outflow of urine, the result of shriveling of the gland around the urethra mouth. Resection of the tissue causing the valve-like action restored conditions clinically at once to normal, and there has been no further trouble during the three years to date. Operative treatment of the shriveled prostate is a more difficult matter than enucleation of an enlarged prostate, and before attempting it, all affections of the nervous system which might be responsible for the insufficiency of the bladder must be excluded. The transvesical route is the only permissible technic, he says, in such cases.

97. **Cystic Kidney.**—Illyes had no suspicion of the true nature of the process when he exposed the kidney in a recent case of tenesmus, recurring slight hematuria and pains in the left kidney region. The kidney was found in polycystic degeneration, but as the other kidney seemed to be functioning normally, he removed the diseased organ and the patient rapidly recovered, coexisting chronic prostatitis healing at the same time.

98. **Syphilis of the Bladder.**—Mucharinsky reports a case of secondary syphilitic manifestations located exclusively in the bladder. The cystoscopic picture was not conclusive but the positive Wassermann reaction and benefit from specific treatment confirmed the diagnosis.

### Zentralblatt für Chirurgie, Leipsic

*May 18, XXXIX, No. 20, pp. 673-704*

99 Sterilization of Catgut by Dry Heat. (Einfache Methode der Sterilisation des Catgut durch trockene Hitze.) K. J. Wederhake.
100 Orbital Phlegmon. Hagedorn.

### Zentralblatt für Gynäkologie, Leipsic

*May 18, XXXIII, No. 20, pp. 633-664*

101 Technic for Ventrofixation of Uterus. (Die Ventrovesicofixatio uteri, ihre Bedeutung für die Prophylaxe der Darmeinklemmung und ihre sonstigen Leistungen.) H. Fuchs.
102 *Therapeutic Application of Heat to Interior of Pelvis. (Zur Pelvithermie.) L. Prochownick.

102. **Application of Heat to the Pelvis.**—Prochownik reports very favorable results in twenty-five cases from therapeutic application of dry heat to the interior of the pelvis by means of Flatau's electric apparatus. The local temperature gradually rises to at most 40 C. (104 F.) and stays at this point for three or four hours, while the temperature of the rest of the body is unaltered.

### Gazzetta degli Ospedali e delle Cliniche, Milan

*January 28, XXXIII, No. 12, pp. 113-128*

103 Alimentary Galactosuria in Health and in Febrile Conditions. (Sulla galattosuria alimentare negli individui normali e nei febbricitanti.) G. A. Parl. First part in No. 6.

### Ugeskrift for Læger, Copenhagen

*May 16, LXXIV, No. 20, pp. 769-806*

104 Dislocation of the Shoulder. (Luxatio humeri, dens Prognose og Behandling.) V. Meisen.

v. 58
1912

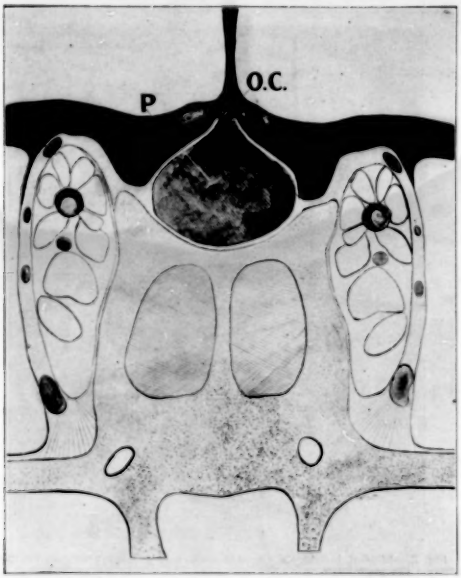


Fig. 1.—Lateral cross-section of brain, showing hypophysis (P) beneath the optic chiasm (O C), as referred to on page 2010.

Fig. 2.—Anteroposterior cross-section of brain, showing hypophysis beneath the optic chiasm, as referred to on page 2010.

ILLUSTRATING ARTICLE ON SURGERY OF THE PITUITARY BODY, BY DR. L. L. MCARTHUR, PP. 2009 TO 2011.

Fig. 3.—Line of incision of the soft tissues in gaining access to the pituitary tumors. See page 2010.

V. 58
1912

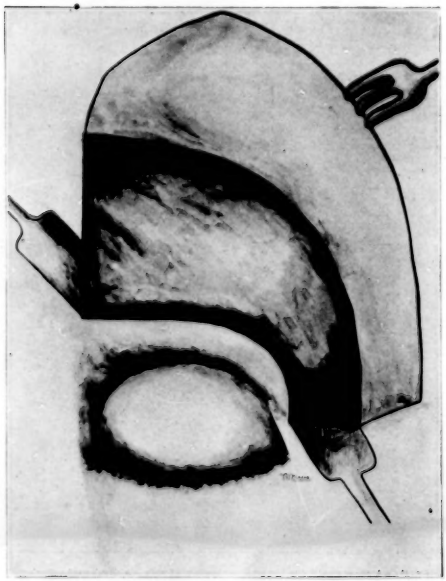

Fig. 4.—Removal of frontal fragment and portion of orbital roof, as described under "Technic."

V. 58
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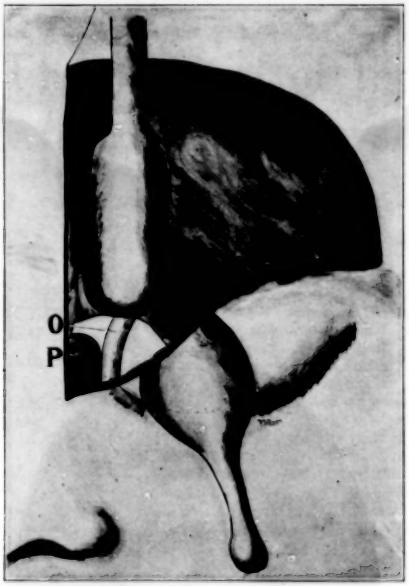


Fig. 5.—Frontal fragment and orbital roof removed, frontal brain retracted upward, eye retracted downward, exposing hypophysis (P) and portion of the optic chiasm (O), through smaller opening in dura. See page 2010, under "Technic."

Fig. 6.—Frontal fragment replaced after operation; from a radiogram, slightly retouched to emphasize the shadow.

V. 58
1912

Fig. 7.—Patient after operation, showing line of incision scarcely visible.